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Advertising in social media: a review of empirical evidence

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This article presents an up-to-date review of academic and empirical research on advertising in social media. Two international databases from business and communication studies were searched, identifying 51 relevant studies. The findings of the identified studies were organized by seven emerging themes: use of advertising in social media, attitudes about and exposure to advertising, targeting, user-generated content in advertising, electronic word-of-mouth in advertising, consumer-generated advertising, and further advertising effects. Besides researched topics and major results, year of publication, journal, theoretical framework, research method, sample, measured constructs, and way of analysis were examined regarding each article. The review concludes by providing an agenda for future research.

Keywords: web 2.0; social media; social network sites; advertising; review; research agenda

1. Introduction

With about one fourth of the world's population currently using social network sites (SNS; eMarketer 2013) and more than 1 billion users monthly watching videos on YouTube (YouTube 2014), social media is now clearly a part of Internet users' daily lives. Social media is defined as all web-based applications 'that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content' (Kaplan and Haenlein 2010, 60). Advertisers have responded to this development by allocating greater proportions of their media budgets to social media (Okazaki and Taylor 2013; Saxena and Khanna 2013). It has been predicted that advertising revenues in social media will grow from US $4.7 billion in 2012 to about US $11 billion in 2017 (Stambor 2013). Social media appears to have become one of the latest environments in which advertising takes place (H. Li 2011).

A growing number of scholars in marketing as well as communication dedicate their work to the study of advertising in social media, though it has been 'only in the last five years that a substantial number of studies on social media as an advertising/promotional vehicle have begun to appear' (Okazaki and Taylor 2013, 58). As a result, almost all existing reviews of online advertising (e.g., Cho and Khang 2006; Ha 2008; J. Kim and McMillan 2008) fail to provide an in-depth analysis of advertising in social media. Two exceptions are the more recent reviews by H. Li (2011) and Khang, Ki, and Ye (2012), which consider new ways of advertising made possible through social media. Specifically, H. Li (2011) named electronic word-of-mouth – a form of advertising that has become popular with the advent of social media (Wang and Rodgers 2011) – as one of

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six major themes in interactive advertising. However, the most recent studies considered in H. Li's work date from 2010. Similarly, Khang, Ki, and Ye (2012) ended their review of social media research in 2010 and did not include the latest developments. In addition, their review did not focus on the results of individual studies. Instead, it presented a macro-level analysis of the frequency, proportion, and occurrence patterns of social media studies across the disciplines of advertising, communication, marketing, and public relations. As the field of online advertising is continuously changing, both of these reviews recommended further research on advertising in social media. Khang, et al. (2012) explicitly forecasted a steady growth in research in this area. Their justification for this forecast referred to the steady increase in research on social media since the emergence of SNS, and the authors projected that this body of work would continue to grow with the ongoing evolution and proliferation of social media usage. Based on this premise, many studies on social media as an advertising vehicle are likely to have been conducted in recent years (Okazaki and Taylor 2013). However, practitioners and researchers continue to lack a systematic overview as well as an agenda for future research. Consequently, the present article aims to review all empirical research on advertising in social media published through June 2014, and to identify the major themes and areas of deficit in this work. Unless explicitly stated otherwise (e.g., consumer-generated advertising), 'advertising' in the present article will be understood as persuasive and planned communication by advertising professionals deliberately placed on third-party websites (Ha 2008; see also Thorson and Rodgers 2012).

2. Method

Advertising is an interdisciplinary phenomenon investigated by scholars in the field of communication as well as those in marketing and advertising (Cho and Khang 2006). Starting from this premise, the literature search in the present study made use of two international academic databases: Business Source Premier, and Communication and Mass Media Complete. Both are known to be among the most comprehensive databases in the fields of business and communication studies (Zamostny 2008). The search was limited to peer-reviewed academic journals, and included the title, abstract, and subject as search fields. To ensure a reference to advertising, selected articles were required to contain the term 'advertis*' (e.g., advertising, advertiser, or advertisement), 'ad,' 'ads', or 'public service announcement' in one of the three search fields. Public service announcements are 'short advertisements that advocate some socially desirable behavior', and are frequently used by authors writing about advertising in noncommercial contexts (Walther et al. 2010, 470). In addition, articles selected for the present study were required to contain one of the following terms: 'social media', 'social web', 'Web 2.0', 'user-generated content', 'electronic word of mouth', 'Facebook', or 'YouTube'. This criterion ensured that the selected articles also contained a reference to social media.

The connection between the subject of advertising and the terms 'advertis*,' 'ad', 'ads', and 'public service announcement' is clear, but the other terms may require some explanation. 'Social web' and 'Web 2.0' were included as search terms together with 'social media' in the search for articles dealing with social media because these three terms are often used interchangeably in the academic literature (Berthon et al. 2012). The term 'user-generated content' (UGC) was also added to the search because it is the defining feature of social media (Kaplan and Haenlein 2010), and 'electronic word of mouth' (eWOM) was added because it is often used interchangeably with or in close relation to UGC in advertising and marketing contexts (Wang and Rodgers 2011). Finally, search

terms were added for 'Facebook' and 'YouTube' because these are currently among the most popular social media sites, and the names of these sites, instead of 'social media', are sometimes used in the title, abstract, or keywords of an article.

The search revealed 520 articles, which were then further limited to those articles that reported empirical research. A lot of the articles found were theoretical papers, case studies, or short, non-empirical introductions, since the researched databases encompass a great variety of journals differing in their empirical reference. In addition, all empirical papers that did not deal with advertising as defined above were excluded, too. Studies dealing, for example, solely with product reviews unrelated to advertising were consequently left out. After applying these criteria, the final dataset was reduced to 51 articles that were considered in this review.

Following the literature synthesis method of Cho and Khang (2006), who reviewed the state of Internet-related research in communications, marketing and advertising, articles were coded for authors and year of publication, journal, research topic, theoretical framework, research method, sample, measured constructs, analysis, and major results. In addition, the type of social media being investigated was coded. Findings are summarized in Table 1.

While the categories of authors and year of publication, journal, research method, sample, measured constructs, analysis, and major results are self-explanatory and were coded as described in Cho and Kang (2006), the categories of research topic, theoretical framework, and social media type may need further explanation. The category 'research topic' refers to 'the main subjects that the authors aimed to examine in their articles' (Cho and Khang 2006, 147). During the coding process, seven major themes emerged of which each of the articles could be assigned to one: use of advertising in social media, attitudes about and exposure to advertising, targeting, UGC in advertising, electronic word of mouth in advertising, consumer-generated advertising, and further advertising effects. The major results of the articles are presented in the far right column of Table 1, according to the seven identified themes. Furthermore, an article was coded as having a theoretical framework when it made explicit reference to a specific theory – that is, 'a systematic explanation or lawlike generalization that is observable or empirically testable' (Cho and Khang 2006, 148) – and derived testable hypotheses from this theory. Articles were either classified as having a theoretical framework – in this case, the respective theory is named in the table – or as having no explicit theoretical framework and no testable hypotheses. If the article stated a specific social media outlet, such as Facebook or YouTube, that the study referred to, the name of the outlet was coded as the social media type. If no such references were made, the general type of social media was coded – for instance, SNS.

3. Results

3.1. Journals and years of publication

All of the identified articles were published from 2006 to 2014 (Figure 1). The majority of the articles (43) were published from 2011 to 2014, reflecting the increase in research on this topic predicted by Khang, Ki, and Ye (2012). The highest number of articles published in a single year was 16 in 2011, probably because of a special issue on social media and advertising published that year by the *International Journal of Advertising*. Considering the nine articles published in the first half of 2014, an equally high number of articles can be assumed for the present year, stressing the currentness of advertising in social media as a research topic.

Table 1. Systematic summary of reviewed articles according to investigated theme and authors' names.

Study	Research topic	Theoretical framework	Research method	Social media	Sample	Measured constructs	Analysis	Major results
Use of advertising in social media								
Park, Rodgers and Stemmle (2011)	Health organizations' use of Facebook	No explicit theoretical framework, no testable hypotheses	Content analysis	Facebook	1760 wall comments on Facebook pages of health organizations	Basic descriptive information, type of organization, interactivity, use of other social media channels, advertising techniques	Cross tabs and χ^2-tests	Health organizations strategically use their Facebook pages to manage their image. The use of interactive features can be improved.
Parsons (2013)	Global brands' use of Facebook	No explicit theoretical framework, no testable hypotheses	Content analysis	Facebook	70 Facebook pages of global brands	Content of tabs, number of likes on the main page, wall content	Frequency tables	Posting on average one update per day, companies have recognized the need to be present on Facebook. While approaches are quite different, Facebook is generally used to develop relationships with consumers.
Waters and Jones (2011)	Nonprofit organizations' use of YouTube videos	No explicit theoretical framework, no testable hypotheses	Content analysis	YouTube	100 most viewed videos from official nonprofit organization YouTube channels	Overall purpose and style of the video, presentation characteristics, appearance of the organization, interactivity	Frequencies and χ^2- tests	YouTube is mainly used to inform and educate users. Organizations do not make full use of the interactive possibilities social media provides for engaging the audience more directly in their communication.
Attitudes towards and exposure to advertising								
Chi (2011)	The influence of user motivation on engaging in advertising in SNS	Social capital theory (no testable hypotheses)	Online survey	Facebook	502 college-aged Facebook users	User motivation, user responses to advertising (perceptions, attitudes, and participation intention)	t-tests, regression analysis	Users' responses to social media marketing are dependent on users' varying motivations.
Chu (2011)	The influence of Facebook group participation on advertising responses	No explicit theoretical framework, no testable hypotheses	Online survey	Facebook	302 Facebook users	Self-disclosure, user needs, attitudes towards social media and social media advertising, viral pass-on intentions	t-tests, regression analysis	Facebook group members maintain more favourable attitudes towards social media and advertising in general than do non-group members.
Dao et al. (2014)	The antecedents of social media advertising value and its effect on purchase intention	Expectancy value theory	Campus survey	Facebook, YouTube	295 college students	Ads' informativeness, entertainment value, and credibility, perceived value of ads, purchase intention	Structural equation modeling	An ad's informativeness, entertainment value, and credibility influence its perceived value, which in turn influences purchase intentions. Effects of informativeness and entertainment are more pronounced when it comes to YouTube users.

(*continued*)

Table 1. (*Continued*)

Study	Research topic	Theoretical framework	Research method	Social media	Sample	Measured constructs	Analysis	Major results
Gironda and Korgaonkar (2014)	Consumer motivations to use SNS, join brand pages, and click on SNS advertisements	Decomposed theory of planned behaviour	Online survey, focus groups	SNS in general	467 college students (online survey), 85 college students (focus groups)	Intention, behaviour, attitude, subjective norms, perceived behavioural control, relative advantage, compatibility, complexity, normative influences, self-efficacy, facilitating conditions	Structural equation modelling, qualitative analysis	SNS usage, joining brand pages, and clicking on SNS advertisements are influenced by respective intentions that, in turn, are mostly influenced by attitudes towards the respective behaviour. Subjective norms and perceived behavioural control are also influential factors, though to a lesser extent.
Kelly, Kerr, and Drennan (2010)	Antecedents of advertising avoidance in SNS	Model of advertising avoidance, no testable hypotheses	Focus groups, in-depth interviews	Facebook, MySpace	23 teenagers (focus groups), eight teenagers (in-depth interviews)		Qualitative analysis	Participants are not annoyed by excessive advertising clutter and report that they generally accept advertising as long as it keeps the use of SNS free of charge.
Lipsman et al. (2012)	The reach of brand pages on Facebook	No explicit theoretical framework, no testable hypotheses	Online survey	Facebook	Internet users (detailed sample description missing)	Brand reach	Frequencies	For every fan of each of the top 1000 fan pages on Facebook, an additional 81 friends can be reached. However, the results also indicated that, if a brand publishes posts about 5 days per week, these posts reach only 16% of their page's fans.
Muk (2013)	Factors influencing young consumers to become fans of brand pages	Technology acceptance model	Online survey	SNS in general	172 college students	Perceived ease of use, perceived usefulness, attitude towards brand page, social influence, intentions to join brand page and purchase	Structural equation modeling	Consumers intention to join brand pages is dependent on attitude towards advertising and social influence. Joining a brand page increases purchase intentions.
Nelson-Field, Riebe and Sharp (2012)	The reach of Facebook brand pages	No explicit theoretical framework, no testable hypotheses	Online survey	Facebook	1520 Facebook users	Self-reported purchase behaviour	Frequency tables	Fans of Facebook brand pages are mostly made up of heavy buyers, fewer light to moderate buyers, and almost no non-buyers of the respective brand.
Nobre and Silva (2014)	The benefit of brand pages in SNS for small- or medium-sized enterprises	No explicit theoretical framework	Semi-structured interviews	Facebook	Four company managers		Qualitative analysis	Results show that brand pages on SNS can have an important role in both relationship development and increased sales for smaller and medium-sized enterprises.

(*continued*)

Table 1. (*Continued*)

Study	Research topic	Theoretical framework	Research method	Social media	Sample	Measured constructs	Analysis	Major results
Pingjun (2013)	Factors influencing users' reactions to marketing communications in SNS	Theory of planned behaviour, ELM	Online survey	SNS in general	189 Internet users	Believes in marketing communications in SNS, attention to marketing communications in SNS	Correlation, regression analysis	Users' attention to marketing communications is positively predicted by their belief in locating product information from SNS and their belief in SNS being legitimate vehicles for advertising.
Sashittal, Srirama chandramurthy, and Hodis (2013)	College students' motivations to use Facebook, and motivations' compatibility with advertising	No explicit theoretical framework, no testable hypotheses	Focus groups, online survey	Facebook	25 college students (focus groups), 69 college students (online survey)	Motivations to use Facebook	Qualitative analysis	Facebook is used to peer into the lives of others, form an identity, and to act on inner narcissistic tendencies. None of these motivations directly matches advertisements on Facebook, with the result that users are rather disinterested in Facebook ads.
Saxena and Khanna (2013)	Factors influencing the perceived value of advertising in SNS	Concept of advertisement value	Online survey	SNS in general	189 college students	Information, entertainment, irritation, advertisement value	Structural equation modeling	Information and entertainment positively affect the perceived value of an advertisement. Irritation has a negative impact.
Tan, Kwek, and Li (2013)	Factors influencing the perceived effectiveness of advertising in social media	No explicit theoretical framework	Classroom survey	Social media in general	149 college students	Attitude towards advertising and advertised brand, purchase intention, time of exposure to advertisement, effectiveness of advertising	Regression analysis	Users' attitude towards advertising is the most powerful factor in affecting the effectiveness of advertising in social media.
Taylor, Lewin, and Strutton (2011)	Factors influencing attitudes towards advertising in SNS	Uses and gratifications approach	Online survey	SNS in general	2642 SNS users	Informativeness, entertainment, self-brand congruity, peer influence, invasiveness, privacy concerns, quality of life, structuring time values, attitude towards ads	Structural equation modeling	The entertainment and information value of an ad have a particularly strong influence on positive attitudes towards advertising. In addition, acceptance of advertisements is further facilitated by positive peer influence and congruity between a user's self and an advertised brand.
Wallace et al. (2014)	A typology of Facebook fans	No explicit theoretical framework, no testable hypotheses	Online survey	Facebook	438 college students	Self-expressive nature of the brand, brand loyalty, brand love, EWOM for the brand, network structure, self-monitoring, opinion leading/seeking, materialism, self-esteem	Cluster analysis	Results reveal four types of fans: Fan-natics (highly engaged in the brand online and offline), Utilitarians (liking brands to get incentives), Self-Expressives (liking brands to make impression), Authentics (genuine likes).

(*continued*)

Table 1. (*Continued*)

Study	Research topic	Theoretical framework	Research method	Social media	Sample	Measured constructs	Analysis	Major results
Yang and Liu (2014)	Antecedents of consumers' regulatory support for social media advertising	Social contract theory	Written survey	SNS in general	489 college students	Prior negative experience, concern for information privacy, perceived trust and risk, support for government regulation	Structural equation modeling	Support for government regulation can be predicted from privacy concerns, trust and risk perception. Support for self-regulation can be predicted from social media use and trust.
Zeng, Huang, and Dou (2009)	Impact of social identity and group norms on community users' intentions to accept advertising	Social identity theory	Online survey	SNS in general	327 Internet users	Social identity, group norms and intention, value and relevance of ads, behavioural intentions	Structural equation modeling	The stronger the social identity and the stronger the group norm possessed by online community members, the more likely they are to develop group intentions to accept advertising in online communities.
Targeting								
Hoy and Milne (2010)	Gender differences in young adults' privacy beliefs and their reactions to behavioural advertising	No explicit theoretical framework, no testable hypotheses	Online Survey	Facebook	589 Facebook users	Participation in SNS, privacy concerns, beliefs about behavioural advertising, privacy protection behaviour	t-tests, factor analysis	Behavioural advertising is of concern to men and women, but of more concern to women. In addition, women engage in more proactive privacyprotection behaviour.
Schumann, Wangenheim, and Groene (2014)	Arguments increasing the acceptance of targeted online advertising	Social norms	Online experiment, field experiment	Websites, social communities	408 Internet users (online experiment), 261 Internet users (field experiment)	Acceptance of behavioural targeting, anticipation of advertising relevance, distributive and procedural justice, various covariates	Mediation analysis using regression analysis	Using a normative reciprocity argument is more effective than using a utilitarian argument related to advertising relevance to increase acceptance of targeted online advertising.
Trusov, Bodapati, and Bucklin (2010)	The determination of influential users in SNS	Social network theory	Social network analysis	SNS in general	330 SNS users	Profile information, demographics, log-in activity	Bayesian approach, Poisson regressions	Only about 20% of a user's contacts significantly influence his or her behaviour. It is not possible to identify these influential users by simply looking at their profiles, number of friends, and profile views. More sophisticated tracking methods are required.
Villiard and Moreno (2012)	How fitness is discussed on Facebook and how these discussions are linked to advertisements for fitness products	No explicit theoretical framework, no testable hypotheses	Content analysis	Facebook	60 Facebook profiles	Profile information's reference to fitness, advertisements' relation to fitness	Frequencies	About 72% of the investigated profiles reference one or more fitness behaviour. About 40% of the displayed ads match the fitness-related profile information, and the percentage declines after refreshing the page with non-fitness-related profile information.

(*continued*)

Table 1. (*Continued*)

Study	Research topic	Theoretical framework	Research method	Social media	Sample	Measured constructs	Analysis	Major results
User-generated content in advertising								
Alacón-del-Amo, Lorenzo-Romero, and Gómez-Borja (2011)	Classifying and profiling SNS users	No explicit theoretical framework, no testable hypotheses	Online survey	SNS in general	399 SNS users	Experience with SNS, various activities on SNS, profile information	Cluster analysis	Four different user types can be found on SNS: the introvert, the novel, the versatile, and the expert communicator. The latter performs marketing-related activities such as commenting on ads or looking for product information.
Campbell et al. (2011a)	Interpretation of consumer conversations around consumer-generated ads	No explicit theoretical framework, no testable hypotheses	Automatic content analysis	YouTube	Conversations around four CGA videos on YouTube		Qualitative analysis	UGC can be classified as an inquiry, debate, laudation, or flame of the advertising, depending on whether it rather is cognitive or affective in nature and whether it aims at collaboration or opposition.
Chang, Chen, and Tan (2012)	The influence of user endorsement (tie strength, expertise) on advertising effectiveness in SNS	Social influence theory, endorsement theory	Lab experiment	Facebook	201 college students	Tie strength, endorser expertise, purchase intention, various control variables	Analysis of variance (ANOVA)	Recipients express higher purchase intentions after receiving endorsed advertisements from people with whom they have strong ties, as compared with those received from people with whom they have weak ties. However, this effect exists only in the case of hedonic products. With regard to utilitarian products, the strength of ties is less influential.
Y.-M. Li, Lee, and Lien (2012)	Advertising in social media via influential endorsers	Social influence theory, endorsement theory	Social network analysis, online experiment	Facebook	312 SNS users	Clicks on ads, number of ads delivered, relevance of ads	Frequencies t-tests	Referring to influential users as endorsers improves advertising effectiveness and efficiency.
Muntinga, Moorman, and Smit (2011)	Users' motivations to engage in brand-related social media use	Uses and gratifications approach	Unstructured interviews	Social media in general	20 Internet users	Users' motivations, brand-related activities	Qualitative analysis	While consuming brand-related content is driven by entertainment, information, and enumeration, contributing to and creating brand-related content are driven by personal identity, social interaction, entertainment, and empowerment.

(*continued*)

Table 1. (*Continued*)

Study	Research topic	Theoretical framework	Research method	Social media	Sample	Measured constructs	Analysis	Major results
Walther et al. (2010)	The influence of online comments on perceptions of antimarijuana PSAs on YouTube	Social influence theory (SIDE)	Online experiment	YouTube	152 college students	Social identification, PSA effectiveness, attitudes, sensation seeking	ANOVA, GLM procedures	The interaction effect of comment valence and social identification affects PSA evaluations and attitudes towards marijuana – that is, mostly highly identifying are influenced in their evaluations and perceptions.
Electronic word of mouth in advertising								
Chatterjee (2011)	Factors influencing the decision to recommend a brand in SNS	Social influence theory	Logfile analysis	SNS in general	2173 SNS users	Page views, ad message views, influencer's SNS relationship, brand message source, recipient type	Hierarchical Bayesian analysis of the seemingly unrelated regression	Marketer- and consumer-generated brand advertisements differ in their influence on recommending probability for high share of posts and long-term influencers, and for member and non-member recipients.
Liu-Thompkins (2012)	Successful strategies for seeding viral campaigns	Social capital theory	Social network analysis	YouTube	101 YouTube Videos	Video poster's network structure, past experience, demographics	Proportional rates, means model	Marketers should choose users strongly tied to them as well as to other users, instead of concentrating simply on wider reach.
Porter and Golan (2006)	The content of successful viral advertising campaigns and its difference to television advertising	No explicit theoretical framework, no testable hypotheses	Content analysis	Social media in general	235 television ads and 266 viral ads	Ad length, company, industry, ad function, ad appeal	Frequencies and χ^2- tests	Results show significantly more provocative content in the viral advertisements, especially in terms of higher occurrences of sex, nudity, and violence. Humour was also identified as a characteristic of viral content.
Okazaki, Rubio, and Campo (2013)	The role of online gossip in promoting brands	Theories about gossip and social exchange, social influence theory	Online survey, online experiment	SNS in general	818 SNS users	Information value, entertainment value, friendship value, propensity to gossip, tie strength, network size, EWOM intention	Multivariate ANOVA	Compared to non-gossipers, gossipers perceive the value of ads in SNS as more informative, entertaining, and important to friendships, and are also more likely to pass these on. Intentions to participate in EWOM are fostered when gossipers belong to large social networks.

(*continued*)

Table 1. (*Continued*)

Study	Research topic	Theoretical framework	Research method	Social media	Sample	Measured constructs	Analysis	Major results
Okazaki, Rubio, and Campo (2014)	The process of promoting ad campaigns via online gossip	Theories about gossip, social influence theory	Online survey	SNS in general	400 SNS users	Information value, entertainment value, friendship value, social enhancement value, propensity to gossip, SNS identification and engagement, normative pressure, EWOM intention	Structural equation modeling	Propensity to online gossip influences SNS identification, which in turn influences SNS engagement, which in turn influences EWOM intentions. Although online gossip propensity is greater when accessing the SNS via handheld computing devices compared with traditional computing devices, EWOM intentions are not.
Strutton, Taylor, and Thompson (2011)	Generational differences in EWOM behaviours	No explicit theoretical framework, no testable hypotheses	Focus groups, classroom survey	SNS in general	47 Internet users (focus groups), 285 college students (survey)	Social media use, EWOM motivations, technical skills	Qualitative analysis, ANOVA	Although generation Y is more engaged in SNS and generation X is more engaged in email, their motivations and behaviours in terms of EWOM are strikingly similar.
van Noort, Antheunis, and Verlegh (2014)	The influence of privacy concerns and self-disclosure on brand and campaign responses	Social response theory, brand relationship theory	Online experiment	SNS in general	94 Internet users	Affective response, purchase and forwarding intentions, privacy concerns	Regression analysis	Self-disclosure elicits favourable affective and behavioural responses, particularly for users possessing relatively low privacy concerns.
Consumer-generated advertising								
Berthon, Pitt, and DesAutels (2011)	The deconstruction of CGA videos	No explicit theoretical framework, no testable hypotheses	Content analysis	YouTube	Three CGA on YouTube		Qualitative analysis	It is possible to gain consumer insights analysing CGA videos qualitatively applying the BASIC IDS framework.
Campbell et al. (2011b)	Comparing two approaches for automatically analysing conversations around CGA	No explicit theoretical framework, no testable hypotheses	Correspondence analysis, machine-based content analysis	YouTube	Comments on four CGA on YouTube	Brand personality dimensions (correspondence analysis)	Frequencies, qualitative analysis	Both approaches appear to be suitable in making sense of conversations around CGA.
Ertimur and Gilly (2012)	Consumer responses to CGA and company ads	No explicit theoretical framework, no testable hypotheses	Content analysis, in-depth interviews	YouTube	191 YouTube ads and comments (content analysis), 14 Internet users (in-depth interviews)	Advertising form, narration, plot, character, appeal and message frame, product visibility and use	Frequencies qualitative analysis	When it comes to CGA, consumers respond more to the ad than to the brand. In contrast, company ads elicit stronger brand associations.

(*continued*)

Table 1. (*Continued*)

Study	Research topic	Theoretical framework	Research method	Social media	Sample	Measured constructs	Analysis	Major results
Lawrence, Fournier, and Brunel (2013)	Factors driving CGA response and CGA effectiveness	Social influence theory, message source effects	Content analysis, two online experiments, online survey	YouTube	Comments on eight YouTube videos (content analysis), 233 Internet users (experiment 1), 196 college students (experiment 2), 200 Internet users (online survey)	Ad's and ad creator's trustworthiness, source identification, engagement, attitudes towards ad and brand, perceived quality of ads	Qualitative analysis, ANOVA, t-tests	CGAs are characterized as more consumer-engaging and trustworthy than traditional advertising. The ad's creator plays a significant role in shaping consumer reactions.
Paek et al. (2011)	The influence of CGA's source (peer vs. expert) on CGA's persuasiveness	Social influence theory, message source effects	Classroom experiment	YouTube	322 college students	Issue involvement and importance, attitude towards video, behavioural intention	Multivariate ANOVA	Results indicate that recipients' attitudes towards the advertised cause are more positively influenced when watching an ad from a peer than from an expert. Source effects are more pronounced among recipients with lower involvement.
Pehlivan, Sarican, and Berthon (2011)	Consumer responses to CGA	No explicit theoretical framework, no testable hypotheses	Content analysis, SAS text mining	YouTube	Comments on 49 video ads		Frequencies, qualitative analysis	Ads differ mostly in terms of the responses evoked by their dominant features. There are no source effects.
Sabri and Michel (2014)	Uses and effects of negative advertising parodies	Humor in advertising	Online experiment	Facebook	256 Facebook users	Attention, brand attitudes, EWOM intentions, purchase intentions	ANOVA	Negative parodies featuring humourous appeals and highly credible claims are more likely to increase the attention paid to the ad, attitudes towards the parody, and intentions to share the ad when compared to parodies featuring either a humourous appeal or a credible claim, or neither. In addition, attitudes towards the parodied brand are lower, though purchase intentions are not affected.
Steyn, Wallström, and Pitt (2010)	Source effects of CGA in financial advertising services	Message source effects, framing theory	Online experiment	YouTube	466 Internet users	Ad likability, demographics	ANOVA	CGA is not preferred over agency-created ads. Ads presented as popular ads among peers score higher on likability compared to ads presented as unpopular.

(*continued*)

Table 1. (*Continued*)

Study	Research topic	Theoretical framework	Research method	Social media	Sample	Measured constructs	Analysis	Major results
Steyn et al. (2011)	Source effects of CGA	Elaboration likelihood model, framing theory	Online experiment	YouTube	466 Internet users	Viewer response profile, ad likability	ANOVA	CGA is not preferred over agency-created ads. Ads presented as popular ads among peers score higher on likability compared to ads presented as unpopular.
Thompson and Malaviya (2013)	Effect of disclosing consumer ad creation on persuasion	Message source effects, social influence theory, persuasion knowledge	Four experiments	Social media in general	125 college students (experiment 1), 151 college students (experiment 2), 116 college students (experiment 3), 123 college students (experiment 4)	Ad and brand evaluation, source recall, thought listing, scepticism towards the ad creator, perceived similarity to the ad creator	ANOVA, regression analysis	Although presenting an ad as consumer-generated can enhance ad and brand evaluations through increased identification with the ad creator (identification effect), it can also decrease these evaluations because common users are often perceived as less competent in creating effective ads (skepticism effect).
Vanden Bergh et al. (2011)	The impact of ad parodies on brands	Theories on humor	Multiple surveys	YouTube	96 college students (phase 1), 258 college students (phase 2), 142 college students (phase 3)	Dimension of ad parodies, attitude towards ad and brand, intention to pass along	Factor analysis, regression anaylsis	Four primary parody dimensions are identified: humor, truth, mockery, and offensiveness. The participants' perceptions of the parodies do not influence their brand attitudes.
Further advertising effects								
Mabry and Porter (2010)	Comparing the effectiveness of official websites versus online promotional contests on SNS as advertising means	No explicit theoretical framework, no testable hypotheses	Online survey	MySpace	13,803 Internet users	Attitude towards the site, past behaviour and future behavioural intentions	ANOVA, regression analysis	The results indicate that a regular website is more effective in influencing a user's intention to watch a movie as compared to a promotional contest on a SNS.
Nelson-Field, Riebe, and Sharp (2013)	The impact of advertising clutter in SNS	No explicit theoretical framework, no testable hypotheses	Natural experiment	Facebook	200 Facebook users and their recorded Facebook sessions	Ad recall	t-tests	Advertising clutter reduces recall, though the reduction is not proportional. Increasing the number of brand impressions by a factor of three results in the halving of the probability of recalling a particular brand.
Pashkevich et al. (2013)	The effectiveness of various advertising formats on YouTube and their influence on users' website satisfaction	No explicit theoretical framework, no testable hypotheses	Online experiment	YouTube	YouTube users (0.1% of the regular YouTube traffic per experimental group)	Watch time, users' perceptions of advertising formats	Frequencies	In-stream ads impact user satisfaction with the website most negatively. Users presented with overlay ads are almost as satisfied as users in a no-ad condition.

Note: CGA, consumer-generated advertising; ELM, elaboration likelihood model; EWOM, electronic word of mouth; GLM, generalized linear model; PSA, public service announcement; SIDE, social identity model of deindividuation effects; SNS, social network site; UGC, user-generated content.

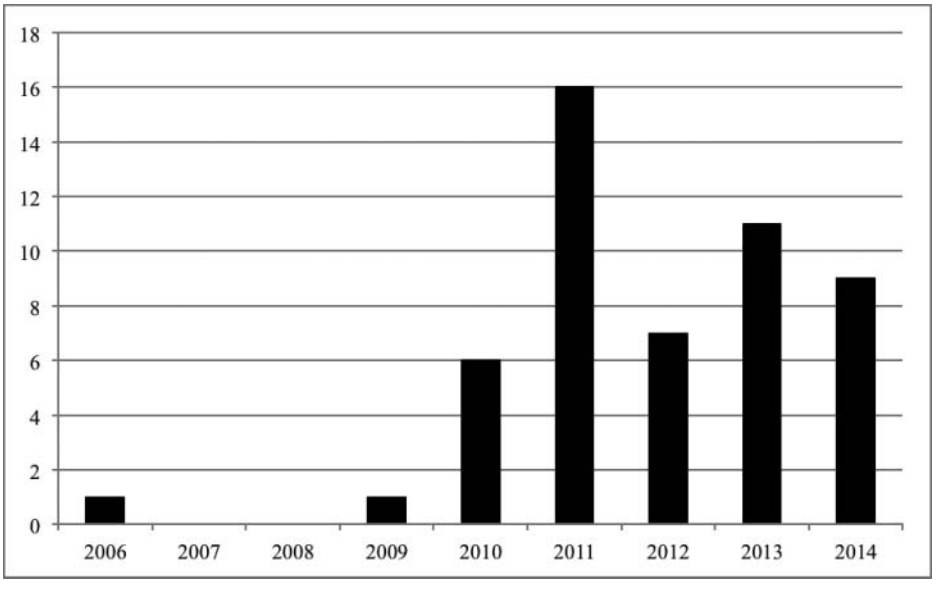

Figure 1. Number of advertising in social media articles published per year.

Looking at the journal outlets (Table 2) that published the articles, three journals predominate in terms of number of articles published: *Journal of Advertising Research*, *Journal of Interactive Advertising*, and *International Journal of Advertising*. Together, these three journals account for more than 50% of the articles published on advertising in social media, coming to eight or nine articles each. *Cyberpsychology, Behavior, and Social Networking*, *Journal of Advertising*, and *Journal of Marketing* follow the top three journals, coming to two or three articles each. The remaining 19 articles were published by various journals, whereby most of the journals can be located in the marketing sector. Few articles were published in journals primarily dedicated to communications such as, for instance, *Human Communication Research*, although advertising is generally accepted as an interdisciplinary phenomenon investigated by scholars in the field of marketing and advertising as well as in communications (Cho and Khang 2006).

3.2. Research topics and major results

As stated before, seven major themes were identified in the selected articles (see Table 1): use of advertising in social media, attitudes about and exposure to advertising, targeting, UGC in advertising, electronic word of mouth in advertising, consumer-generated advertising, and further advertising effects. The findings are reported by these themes and summarized at the end of each section.

3.2.1. Use of advertising in social media

Studies dealing with the use of advertising in social media are relatively rare. One example of a study focusing on this topic is Parsons' (2013) investigation of advertising on the official Facebook pages of 70 global brands. The studied companies posted roughly one update per day, focusing mostly on product-related information. In addition, they asked

Table 2. Journal outlets ranked by number of advertising in social media articles published through June 2014.

Journal	Number of articles
Journal of Advertising Research	9
Journal of Interactive Advertising	8
International Journal of Advertising	8
Cyberpsychology, Behavior, and Social Networking	3
Journal of Advertising	2
Journal of Marketing	2
Academy of Marketing Studies Journal	1
Business Horizons	1
Chinese Journal of Communication	1
Human Communication Research	1
IEEE Transactions on Engineering Management	1
International Business Research	1
International Journal of Electronic Commerce	1
International Journal of Market Research	1
Journal of Consumer Behaviour	1
Journal of Financial Services Marketing	1
Journal of Interactive Marketing	1
Journal of Marketing Analytics	1
Journal of Marketing Management	1
Journal of Marketing Research	1
Journal of Nonprofit & Public Sector Marketing	1
Journal of the Academy of Business & Economics	1
Journal of Transnational Management	1
Psychology and Marketing	1
Vision: The Journal of Business Perspective	1

users to share their own product experiences. Incentives were frequently offered to get consumers involved in these conversations. Parsons (2013, 35) inferred that the focus of SNS communication of global brands 'seems to be more on trying to develop relationships with consumers rather than on simply providing information'.

In contrast, after conducting a content analysis of the top 100 YouTube channels belonging to nonprofit organizations, Waters and Jones (2011) concluded that social media is mostly used to inform and educate target groups. Further, they argued that the analysed channels did not make full use of the interactive possibilities social media provides for engaging the audience more directly in their communication. Park, Rodgers, and Stemmle (2011) drew the same conclusion following their analysis of 35 Facebook pages of health organizations. Although the health organizations used SNS to manage their image and promote their work, they did not take full advantage of the interactive communication features.

It seems that companies, as compared with non-profit organizations, take more advantage of the interactive potential of advertising on SNS and focus more on engaging users in their communication. However, this difference might be due to the fact that the study of companies was conducted 2 years later than the other two studies, possibly indicating

that advertisers have become increasingly familiar with the interactive potential of social media. Regardless of the reason for the difference, more research is needed in this area. This is further supported by the fact that all of the identified studies on use of advertising in social media focus on specific spheres of advertising (e.g., health organizations) and types of media, instead of providing a more general overview of advertising in social media.

3.2.2. Attitudes towards and exposure to advertising

3.2.2.1. Advertising in general. Kelly, Kerr, and Drennan (2010) were the first to investigate attitudes towards advertising, and the avoidance of advertising on SNS. Focusing on teenagers as early adopters of the then-relatively-new medium, they gathered data using focus groups and in-depth interviews. Participants were not annoyed by excessive advertising clutter, and reported that they generally accept advertising as long as it keeps the use of SNS free of charge. Users are clearly aware that SNS need sufficient funding and that this can be achieved through advertising. Zeng, Huang, and Dou (2009) demonstrated that valuing and identifying with an online community increased user intention to accept advertising in the community. This corresponds to Chu's (2011) finding that Facebook members had more positive attitudes towards Facebook advertising than did nonmembers. Despite the fact that SNS are viewed as *the* medium to target specific audiences with matching advertisements, participants in the study conducted by Kelly, Kerr, and Drennan (2010) frequently indicated that ads were not relevant to them. In addition, advertisements were perceived as untrustworthy. The authors concluded that teenagers avoid advertisements mostly because of their past negative experiences, or because of the advertisement's irrelevance or untrustworthiness, and, to a lesser extent, because of clutter or disruption caused by the advertisements. These findings were further confirmed in a comparable study by Sashittal, Sriramachandramurthy, and Hodis (2012), which found that college students were disinterested in SNS advertising because ads are perceived as lacking in credibility. In addition, the students noted that ads often feature nothing more than a link and are not very engaging, and that ads are frequently insensitive to the students' current needs and interests. Since SNS are very much concerned with users presenting themselves to and interacting with others, the authors suggested that advertising should more strongly embrace these motivations for usage. Specifically, they proposed co-creating, together with users, advertising content that could be shared with other users, instead of simply using SNS as a new means of billboard advertising.

Seeking to identify factors facilitating the acceptance of advertising on SNS, Taylor, Lewin, and Strutton (2011) interviewed 2462 SNS users. Their results revealed that the entertainment and information value of an ad had a particularly strong influence on positive attitudes towards advertising. Compared with information, entertainment exerted approximately four times more influence. Advertisers were consequently advised to focus, when possible, on ads that are entertaining. In addition, acceptance of advertisements was further facilitated by positive peer influence and congruity between a user's self and an advertised brand. A study by Saxena and Khanna (2013) found similar results, showing that advertisements on SNS are more appreciated when they are more informative and entertaining (see also Tan, Kwek, and Li 2013). Dao and colleagues (2014) extended these results, not only showing that Facebook and YouTube users perceive entertaining and informative ads as more useful, but also revealing that this increased usefulness leads to higher purchase intentions in terms of the advertised product.

Interestingly, the ads' perceived information and entertainment value exerted less influence on the perceived utility of the ads when it came to Facebook members as compared to YouTube users. Since YouTube is more about looking for relevant and exciting content whereas Facebook is more about networking, advertising on YouTube seems to be more beneficial in terms of meeting the users' needs and is thus perceived as more useful (Dao et al. 2014). In addition, Taylor, Lewin, and Strutton (2011) discovered that advertisements perceived as invasive or distracting have a negative effect on advertising attitudes, though this effect was much smaller than the positive influence of an ad's entertainment or information value. The results of this study also indicated that users' privacy concerns reduce advertising acceptance, a finding that was confirmed in a Chinese study (Yang and Liu 2014).

Focusing on the users, Chi (2011) asked whether users' motivations to engage in social networking influence their responses to advertising on SNS. A survey of 502 Facebook users (college students) revealed that the needs for social bonding and emotional engagement play an important role. Specifically, SNS users looking to fulfill these needs were more willing to trust SNS advertising, perceived the ads as more entertaining, and reported higher intentions to participate in advertising. Although the author did not provide an explicit explanation for these findings, it seems likely that these users were generally more trusting of SNS because they frequently shared and maintained strong ties with close friends on the SNS. In addition, Chi (2011) reported that, compared with banner advertising, participants generally liked brand communities more and reported higher intentions to participate in them. Given that users consider SNS a legitimate way to deliver product information, this level of participation can be further fostered (Pingjun 2013).

In sum, social media users generally accepted advertising as long as it kept a valued service free of charge, and they reported that they are not overwhelmed by advertising clutter. Providing entertaining and informative ads may facilitate acceptance particularly well, and users' privacy concerns should be taken seriously. Surprisingly, social media users often indicated ads to be irrelevant to them, calling into question the effectiveness of targeting on SNS (see also section 3.2.3, on Targeting). Most importantly, advertisers should put more effort into creating credible ads, as the frequent perception of ads as untrustworthy substantially reduces the effectiveness of advertising (MacKenzie and Lutz 1989).

3.2.2.2. Brand pages. Digging deeper into social media advertising, Muk (2013) investigated factors that cause young SNS users to become fans of brand pages:

> Brand pages are a form of brand community sponsored by advertisers. Companies post branded content (brand posts) on their pages that can be shared and. . .consumers can add themselves as fans to the brand pages by clicking the 'like' button on the ads. (Muk 2013, 128).

Following the technology acceptance model, Muk (2013) showed that users' positive attitudes towards brand pages were positively linked with their intentions to join these pages. Attitudes, in turn, were positively affected by the perceived usefulness of SNS advertising and the perceived ease of using the SNS. Expecting positive feedback from a friend or being directly invited by a friend increased users' joining intentions, too. Joining intentions, in turn, were positively related to purchase intentions, indicating the immediate usefulness of brand pages for marketers (see also Lipsman et al. 2012). To maintain the

usefulness of brand pages, Muk (2013) advised marketers to concentrate on creating informational messages and persuading opinion leaders to invite other members to join. Results were further confirmed by a study by Gironda and Korgaonkar (2014) showing that joining brand pages can be significantly and strongly predicted from respective behavioural intentions that, in turn, are mostly dependent on attitudes towards joining a brand page. Interestingly, these attitudes could be traced back to whether or not joining a brand page fits users' needs and lifestyle and also offers unique benefits, matching the influence of perceived usefulness found by Muk (2013). The study found comparable results when it came to explaining factors influencing the activity of clicking on SNS advertisements.

After a person joins a brand page, he or she can be reached relatively easily by placing advertisements in his or her personal newsfeed. However, this raises the question of what kind of customer can be reached through this type of earned media. Looking at the fan bases of different Facebook brand pages, Nelson-Field, Riebe, and Sharp (2012) found mostly heavy buyers, fewer light to moderate buyers, and almost no non-buyers of these brands (see also Sashittal, Sriramachandramurthy, and Hodis 2012). Although this result seems plausible because one would expect loyal customers to be the most interested in becoming fans, the finding has significant implications for advertisers. Compared with the entire customer base of a brand, usually made up of mostly light buyers, fewer moderate buyers, and very few heavy buyers (Ehrenberg 1988), the buyer distribution of a Facebook fanbase appears to be completely oppositely skewed. For this reason, Nelson-Field, Riebe, and Sharp (2012) have questioned the value of brand pages as a stand-alone advertising medium because they reach only a small proportion of the entire customer base. However, brand pages offer the advantage of targeting the most loyal customers, who can provide useful insights into customer reactions to newly developed products. In addition, those customers can be turned into brand advocates who may contact a much larger audience through their friends. According to a Facebook fan typology by Wallace and colleagues (2014), that identified four different types of Facebook fans, the so-called Fanatics and Self-Expressives might be most suitable for being brand advocates. Specifically, they highly engage in eWOM and possess a large number of friends on Facebook. As opposed to this, Utiliarians mostly like brands to get incentives, while Authentics show genuine like of a brand. However, this like is not self-expressive.

The aspect of brand advocates was also taken up by Lipsman and colleagues (2012) in their investigation of the ways brands reach fans or friends of fans on SNS. The authors reported that for every fan of each of the top 1000 fan pages on Facebook, an additional 81 friends can be reached. However, the results also indicated that, if a brand publishes posts about five days per week, these posts reach only 16% of their page's fans because users are not always logged in and because they may miss a post due to other posts in their newsfeeds pushing it lower in the queue. Interestingly, these benefits seem to hold true for small- and medium-sized enterprises with fewer Facebook fans, too. According to semi-structured interviews with managers of these kinds of enterprises, brand pages are successfully used to develop closer relationships with customers as well as to increase sales (Nobre and Silva 2014).

In summary, brand pages seem to be a valuable advertising instrument for targeting and taking care of the most loyal customers. Turning these customers into brand advocates and getting valuable consumer insights are further advantages. Although brand pages mainly engage the most loyal customers, other users may be convinced to join when they receive positive feedback from friends and have positive experiences with the SNS and the brand.

3.2.3. Targeting

Targeted online advertising includes all kinds of web advertising based on information about the ad recipients available to advertisers through the Internet. Examples are prior search and browsing behaviour, geographic and demographic information, and any form of UGC created by the recipients (Schumann, von Wangenheim, and Groene 2014). Concentrating on the latter kind of information, Villiard and Moreno (2012) investigated the extent to which UGC in SNS profiles is related to the advertising displayed next to the profiles. Using information from a previous content analysis of fitness discussions on Facebook, Villiard and Moreno (2012) created Facebook status updates related to fitness. These status updates were then inserted into a student's Facebook profile, and the advertisements displayed next to the profile were coded. The results indicated that about 40% of the displayed ads matched the fitness-related status updates, and the percentage declined after refreshing the page with non-fitness-related status updates. Although a substantial proportion of the displayed ads referred to the status updates, upon further investigation, many were found to be irrelevant to the studied audience (college students; e.g., too expensive). 'This shows that advertisements are paired to. . .key words, but are most likely displayed [too] nonspecifically', wrote Villiard and Moreno (2012, 567), explaining the irrelevance of ads frequently mentioned in surveys.

Instead of targeting users through information displayed on their profiles, another approach is to target influential SNS users in particular (Trusov, Bodapati, and Bucklin 2010). Influential users are those who have a significant influence on the activity levels of other users, and are therefore thought to be particularly effective in spreading advertisements or knowledge about brands or products. Trusov, Bodapati, and Bucklin (2010) tracked and connected the activities of 330 SNS users and their friends. Their findings revealed that only about 20% of a user's contacts significantly influenced his or her behaviour. The authors concluded that it was not possible to identify these influential users simply by looking at their profiles, number of friends, and profile views, and noted that more sophisticated tracking methods are required.

Most social media services face the problem of low acceptance of targeted advertising because users are concerned about their privacy (Schumann, von Wangenheim, and Groene 2014). In a survey of 589 young adults, Hoy and Milne (2010) found that female users were more concerned about their privacy and rejected targeting more strongly, compared with male users. Accordingly, women were also more likely to show proactive self-protection behaviours including reading privacy policies, monitoring their own profile and privacy settings, and asking other users to delete information about them. However, the concern of both men and women was rather low, possibly because only half were aware of how their personal information is used for advertising purposes.

Schumann, von Wangenheim, and Groene (2014) investigated whether acceptance could be increased more effectively by reminding users of fairness and reciprocity considerations (a free service in exchange for users' support) instead of merely telling users that targeted advertisements will be more relevant to them. Conducting two field studies and one scenario experiment, the authors demonstrated that reciprocity arguments are more effective than relevance arguments in terms of persuading users to accept targeting. Provided that the website is attractive and highly useful, users were also more likely to disclose personal information. Interestingly, acceptance decreased when the value of a website was dependent on UGC and user contributions.

The few studies investigating targeted advertising in social media draw a multi-faceted picture. Although targeting is able to allocate advertisements to matching users or user characteristics, allocated ads frequently do not meet users' current needs and

interests. Given this problem, an alternative way of targeting might therefore follow the approach of targeting influential users in particular, as proposed by Trusov, Bodapati, and Bucklin (2010). Social media owners should follow reciprocity norms increasing the acceptance of targeting as well as explain more thoroughly to users how their personal data are used and how targeted advertising is useful to site owners, advertisers, and the users themselves.

3.2.4. User-generated content in advertising

In contrast to 'traditional' media advertising, social media advertising frequently offers the opportunity for instant public response alongside an advertisement, the so-called UGC. UGC is defined as all publicly (or partially publicly) available online information initiated and/or created by end-users, as opposed to by media professionals (Daugherty, Eastin, and Bright 2008; Organisation for Economic Co-operation and Development [OECD] 2007).

> Although UGC has been closely aligned and often confused with eWOM, the two differ depending on whether the content is *generated* by users or the content is *conveyed* by users. For example, footage on YouTube that is *generated* and posted by users is UGC. However, an Internet user who sends her friends a link to a YouTube site is engaging in eWOM. (Cheong and Morrison 2008, 3).

It is important to note that the present article adopts a broad understanding of UGC; that is, the generation of UGC starts with any little bit of online information that was initially caused by end-users, as opposed to media professionals. This includes aggregated user representations like click counts, Facebook likes, or user ratings co-appearing with advertising, as well as short user endorsements in the form of commentaries (Walther and Jang 2012). For analytic purposes, UGC and eWOM are discussed in separate sections in the present study. While this section is about the uses and effects of UGC co-appearing with professionally created advertising on websites, the next section (Electronic word of mouth in advertising) is about conveying professionally created advertising through means of social media.

Following a study by Campbell and colleagues (2011b), UGC in response to advertising can be assigned to one of four types of communication depending on whether it is cognitive or affective in nature, and whether it aims at collaboration or opposition. UGC can be classified as an inquiry, debate, laudation, or flame of the advertising. In a study of individuals creating UGC in response to advertising, Alarcón-del-Amo, Lorenzo-Romero, and Gómez-Borja (2011) surveyed 399 SNS users. Their findings indicated that only a minority of the users, called 'expert communicators', created UGC. These users represented about 20% of the entire SNS audience, and the majority of them were women and young adults. The most notable features of expert communicators are their wide SNS experience, high degree of activity on the site, and high number of contacts when compared with other users. The last characteristic seems especially interesting, because less active audiences may be reached through the friendship networks of expert communicators (Lipsman et al. 2012). Using data from a series of unstructured interviews, Muntinga, Moorman, and Smit (2011) confirmed that only the most active users engage in creating brand-related UGC. They revealed four motivational categories underlying this behaviour: social interaction, personal identity, entertainment, and empowerment. The motivation of empowerment seems especially relevant to marketers, as it refers to using social media to influence other people's perceptions of brands and companies: 'Consumers are

very much aware of their influence over other people and the collective power that they. . .may exert over product owners' (Muntinga, Moorman, and Smit 2011, 37). The primary motivations for consuming UGC were needs for information and entertainment.

Examining factors influencing the effectiveness of such user-endorsed advertisements, Chang, Chen, and Tan (2012) investigated whether or not advertisements being presented as endorsed by strongly related end-users – that is, co-appearing with UGC from strongly related end-users – would evoke different effects than advertisement being presented as endorsed by weakly related end-users. In addition, the expertise of the endorser (high vs. low) and the type of product advertised (utilitarian vs. hedonic) were included as factors. Using an experimental study, they demonstrated that recipients expressed higher purchase intentions after viewing advertisements presented as endorsed by people with whom they had strong ties, as compared with those presented as endorsed by people with whom they had weak ties. However, this effect existed only in the case of hedonic products. With regard to utilitarian products, the strength of ties was less influential, and the expertise of the endorser was the key variable in predicting purchase intentions. Apparently, users look for expertise when making decisions about functional products, whereas they rely more on people who are close to them when making decisions about hedonic products. As purchase intentions for the hedonic products are primarily driven by the consumer's affection, closely related persons, with whom they hold common values, are more influential (Chang, Chen, and Tan 2012). A study by Walther and colleagues (2010) lends further support to the social influence of UGC. Investigating the influence of anti-marijuana public service announcement videos and the related user comments on YouTube, the authors revealed that users' comments primarily influenced recipients' perceptions when there were strong ties between the originators and recipients of the UGC. Specifically, when the recipient identified strongly with the commenting user, the recipient's attitudes to marijuana and perceptions of the advertised cause differed based on the comment's valence (positive vs. negative). Similarly, Y.-M. Li, Lee, and Lien (2012) found that recipients considered advertisements to be more relevant, and more frequently clicked the advertisements, when these were presented as preselected and endorsed by a related person.

In sum, UGC is as an important factor in social media advertising that influences recipients' attitudes and perceptions in conjunction with the original advertising messages. Depending on the positive or negative content of the UGC, advertising effects can be enhanced or diminished. Relationships between UGC originators and recipients seem to moderate this process, as recipients are mostly influenced when they share social relationships with the originators of the content. Although a minority of users actively engages in creating UGC, a much larger number of people may be influenced through the friendship networks of these users. This highlights the potential impact of user-to-user interactions in social media advertising.

3.2.5. Electronic word of mouth in advertising

Advertisers intending to make use of eWOM or viral advertising are best advised to communicate their messages initially to consumers who are closely connected to the advertised brand, as results from a study by Liu-Thompkins (2012) indicated that these users are more easily influenced by the originating brand and are subsequently more likely to pass on the message to related persons. Advertisers should seek to reach a large number of consumers who are easily influenced rather than focusing on fewer highly connected users, even though some of them might not possess many contacts to whom the message

could be forwarded (Liu-Thompkins 2012). Next to a user's connection to a brand, Okazaki, Rubio, and Campo (2013) propose that a user's propensity to gossip online – that is, to engage in online small talk about social or personal topics – may increase the probability of passing on ads or ad campaigns. Surveying 818 SNS users, they found that gossipers compared to non-gossipers perceive the value of ads in SNS as more informative, entertaining, and important to friendships, and are also more likely to pass these on. Intentions to participate in eWOM were fostered when gossipers belonged to large social networks in terms of their SNS friends. The authors attribute this moderation to the fact 'that members of large network-based communities seek a reputation [for instance, by promoting a valued brand] to establish trust and status and to foster social interactions, since they usually don't know each other initially' (Okazaki, Rubio, and Campo 2013, 101). A follow-up study revealed that a user's propensity to gossip affects eWOM intentions indirectly via SNS identification and engagement, which are strengthened by online gossip and which in turn influence intentions to participate in eWOM (Okazaki, Rubio, and Campo 2014). According to a survey conducted by Chu (2011), viral advertising effects can also be fostered by targeting users who generally like to disclose information about themselves on SNS. In addition to self-related information, these users were more likely to pass on advertising messages. This finding could be replicated by an online experiment in which participants were introduced to a SNS campaign (van Noort, Antheunis, and Verlegh 2014). A brand character interacted with the participants and either asked them to self-disclose personal information (e.g., zip code, educational level) as part of the campaign, or did no such thing. Results revealed that self-disclosure elicited favourable affective responses as well as higher purchase intentions and intentions to forward the campaign. This was particularly true for users possessing relatively low privacy concerns.

Interestingly, this communication and forwarding behaviour transfers to spheres outside the Internet. In reporting the results from focus groups, Strutton, Taylor, and Thompson (2011) referred to a three-stage process that

> apparently begins with an initial online exposure to advertising content. This exposure, in turn, facilitates second-level offline, or traditional, WOM [word-of-mouth] conversations about the advertising content originally encountered online. Finally, these traditional WOM exposures facilitate third-level follow-up tertiary e-searches by those informed through WOM. (572).

A follow-up survey revealed no generational differences (Generation X vs. Y) in this behaviour.

In addition to consumer characteristics, the content and origin of an ad seem to be key in determining whether it is passed on to other users. Comparing 235 television ads with 266 viral advertisements, Porter and Golan (2006) identified significantly more provocative content in the viral advertisements, especially in terms of higher occurrences of sex, nudity, and violence. Humour was also identified as a characteristic of viral content. With regard to the origin of the forwarded messages, Fortune 500 companies were less likely to use viral advertising as compared with non-Fortune 500 companies. However, this finding may no longer be applicable because viral advertising, then relatively new, is no longer unpredictable, potentially making it more attractive to more conservative companies. In an investigation of common users as originators of viral advertisements, Chatterjee (2011) compared member-generated brand messages on SNS with professional advertising messages. The findings indicated that the brand messages generated by members were forwarded more readily, although there were no differences in how recipients of the forwarded posts engaged with or evaluated the advertised products.

To summarize the findings on this theme, the success of eWOM seems to depend on characteristics of both the consumer and the message. Advertising messages are particularly likely to be passed on by users if a user is strongly connected to a brand and generally likes sharing self-related content. In terms of the message itself, provocative or humourous content facilitates a message being forwarded, and eWOM can transfer to WOM, thus also affecting offline spheres.

3.2.6. Consumer-generated advertising

A surprisingly large number of studies have explored consumer-generated advertising (CGA), sometimes called user-generated advertising. CGA is a subtype of UGC intended to inform, persuade, or entertain other users about brands or products (Campbell et al. 2011b). The distinguishing feature of CGA when compared to UGC in general is that consumers make use of established advertising vehicles such as banners or videos while modeling the content along the lines of popular or unpopular commercials. Consumers explicitly imitate the style of commercials (Ertimur and Gilly 2012; Steyn et al. 2011). Vanden Bergh et al. (2011) examined recipients' perceptions of consumer-generated parodies of existing advertising campaigns on YouTube. They identified four primary dimensions: humour, truth, mockery, and offensiveness. The participants' perceptions of the parodies did not influence their brand attitudes. However, users were more likely to pass along the consumer-generated ads and to have better attitudes towards the parodies when they scored higher on humour and truth and lower on offensiveness. Since no influences were found on brand attitudes, the authors concluded that viewers apparently distinguish between advertising created by advertisers and consumer-generated ad parodies aimed at entertainment. A further reason for these findings might be that viewers tend to focus on ad characteristics when watching CGA, potentially diverting their attention from the advertised brand (Ertimur and Gilly 2012). As opposed to this, Sabri and Michel (2014) found negative effects on brand attitudes. Experimentally testing the influence of humour and claim credibility in negative ad parodies, the authors were able to show that parodies featuring a humourous appeal as well as a credible claim decreased brand attitudes when compared to parodies including either a humourous appeal or a credible claim, or neither. In addition, recipients were also more likely to pass along the ads and paid greater attention to them. The authors concluded: 'Overall, a credible parody with humour may harm the brand attitudes. . .brand managers and organizations should acknowledge the seriously damaging potential of parodies' (Sabri and Michel 2014, 244).

Focusing on the effect of different sources, Lawrence, Fournier, and Brunel (2013) investigated the effects of CGA on YouTube in comparison with professional advertising. Their results indicated that CGA was more credible and trustworthy as well as more cognitively and emotionally engaging. In addition, CGA was perceived to be of higher quality, regardless of the actual quality, because of lower initial expectations when watching the ads. In contrast, Pehlivan, Sarican, and Berthon (2011) found no such source effects in a content analysis of 13,580 user comments on 49 firm- and consumer-generated ads on YouTube. Instead, they proposed that ads differ mostly in terms of the responses evoked by their dominant features, such as a specific song or a particularly humourous representation.

A recent study by Thompson and Malaviya (2013) provided further insight into potential differential source effects in CGA. Conducting four experimental studies, the authors revealed two opposing processes underlying the influence of disclosing advertising as consumer-generated on viewers' evaluations. They found that, although presenting an ad

as consumer-generated could enhance ad and brand evaluations through increased identification with the ad creator (identification effect), it could also decrease these evaluations because common users are often perceived as less competent in creating effective ads (scepticism effect). Furthermore, the authors identified three factors moderating these underlying effects. Specifically, scepticism is hindered when recipients lack the cognitive resources to scrutinize the advertising material, whereas identification and positive effects are increased when the creator is presented as similar to the recipients. Regardless of the identification, positive effects of CGA were also fostered when ads were watched by consumers highly loyal to the advertised brand, as opposed to recipients with low levels of loyalty. This finding was further confirmed by in-depth interviews conducted by Ertimur and Gilly (2012), questioning 14 Internet users about their views of CGA on YouTube. Although CGA was perceived as more authentic, consumers 'express skepticism regarding its credibility. . . . CGA are only credible if the focal product has familiarity and established credibility with the consumer audience because the source does not' (Ertimur and Gilly 2012, 126). Contrary to previous findings (e.g., Vanden Bergh et al. 2011), Thompson and Malaviya (2013) showed that CGA can affect attitudes towards the advertised brand but the attitudes evoked are not necessarily favourable, particularly when recipients evaluate an ad carefully or when it is widely publicized that an ad is consumer-generated. This corresponds to the findings of Steyn and colleagues (Steyn, Wallström, and Pitt 2010; Steyn et al. 2011), who researched CGA effects on YouTube and suggested that recipients are generally more critical towards ads when exposed to cues explicitly stating the source of the ad, regardless of whether the source is a common user or an ad agency.

Instead of comparing the influence of CGA with the influence of ads created by advertising professionals, Paek and colleagues (2011) investigated whether recipients would respond more favourably to consumer-generated public service announcements (found on YouTube) created by peers, as compared with announcements created by issue experts. Their results indicated that recipients' attitudes towards the advertised cause were more positively influenced when watching an ad from a peer than from an expert. In line with the elaboration likelihood model (Petty and Cacioppo 1986), source effects were more pronounced among recipients with lower involvement.

Apart from investigations of the effects of CGA as an advertising vehicle, Berthon, Pitt, and DesAutels (2011) argued for the use of CGA as tool of consumer research. Specifically, they proposed a qualitative research methodology using CGA as a source of consumer insights, presenting an analysis of consumer-generated YouTube videos as an example. They suggested that future studies should also analyse the responses evoked by CGA. In line with this idea, Campbell and colleagues (2011a) proposed analysing these responses using correspondence analysis. They first searched the comments on different CGAs on YouTube for pre-selected words drawn from Aaker's (1997) brand personality dimensions and then compared the different CGAs based on the words found. In this way, they were able to allocate distinct brand personality profiles to various CGAs and brands.

In conclusion, many studies explore the phenomenon of CGA. The majority of these studies have investigated the effects of CGA, frequently concentrating on the fact that the ads are generated by consumers instead of advertising professionals. Although the results are somewhat ambiguous, it seems that when recipients identify closely with the originator or when they are very familiar with the brand, they perceive CGA to be more authentic and credible and the brand to be more positive. Recipients tend to express skepticism and to evaluate brands negatively when they question the originator's competence in creating ads, and when it is overly publicized that an ad is consumer-generated. Several authors have also suggested deriving consumer insights from CGA. In addition, it bears

mentioning that almost all studies on CGA investigated its uses and effects with regard to YouTube. YouTube seems to be *the* primary social media outlet when it comes to CGA.

3.2.7. Further advertising effects

Although the studies discussed above did not show social media users to be overwhelmed by advertising clutter (see section 3.2.2), it remains possible that advertising clutter has a negative influence on advertising effectiveness. Nelson-Field, Riebe, and Sharp (2013) recorded the Facebook sessions of 200 users and coded all brand impressions visible during each session. Users were then asked to recall all of the brands from their sessions. As one might expect, advertising clutter reduced recall, though the reduction was not proportional. Increasing the number of brand impressions by a factor of three resulted in the halving of the probability of recalling a particular brand. In addition, strong and well-known brands were less affected by highly cluttered environments, probably because of the automatic detection of familiar brands (Alba and Hutchinson 1987). The authors consequently recommended spending advertising budgets in environments with low clutter when advertising a new or smaller brand and when attempting to grow a brand.

Pashkevich and colleagues (2013) investigated the effects of social media advertising on users' online behaviour and website satisfaction from the perspective of the website owners. They conducted a study using YouTube, where participants were randomly assigned to one of four advertising format conditions: The participants were presented with overlay and in-stream ads, overlay or in-stream ads only, or no ads at all. The findings from the study demonstrated that in-stream ads impacted user satisfaction with the website most negatively, and this was also reflected in their online behaviour. Participants presented with in-stream ads spent the least amount of time watching videos. Users presented with only overlay ads were almost as satisfied as users in the no-ad condition. Furthermore, enabling users to skip in-stream advertising reduced the ads' negative impact by about 30%. The authors therefore recommended using skippable advertisements to increase user satisfaction with the website experience and to enhance the active engagement of users in the advertising process by allowing them to choose the ads they want to watch.

Comparing the effectiveness of advertising a movie via SNS (Myspace) with advertising on regular websites, Mabry and Porter (2010) surveyed users of one website of each type. The results indicated that the regular website was more effective in influencing the user's intention to watch the movie. However, the authors ascribed this difference mostly to the fact that the regular website provided more content and interactive features, both of which positively influenced the user's intention to watch the movie. Although the authors tried to control users' preexisting interests in the movie through measuring whether participants entered the websites on purpose or arrived at them by chance, users of the two websites studied appear to have had differing viewing motivations. Only 951 SNS users completed the survey, compared with 12,852 regular website users. This difference in participation numbers may be due to varying degrees of involvement with the advertised movie. The difference in involvement may have caused the variation in intentions to watch the movie.

The three studies presented in this section clearly indicate advertising effects aside from the studies on advertising and UGC, advertising and eWOM, and CGA discussed in previous sections. Nevertheless, more research is needed to account for the special features of social media. Although some effects that have been established for online media in general may transfer to social media (Ha 2008), this cannot be assumed without further empirical investigation.

3.3. Theoretical framework

Looking at the studies' theoretical foundation, about 45% featured no explicit theoretical foundation – that is, they did not make explicit reference to a specific theory nor did they derive testable hypotheses from a theory. This finding matches the results of a review on theory use in Web 2.0 studies (Chong and Xie 2011) revealing that only a quarter of the 141 articles investigated therein mentioned a specific theory. Keeping in mind that the review by Chong and Xie (2011) was conducted four years ago, the absence of theory seems to decline over time. This was further supported by the fact that about 56% of the articles lack a theoretical framework when looking at the years 2011 or 2012, whereby this proportion decreases to 45% in 2013 and to 22% in 2014. However, these figures should be interpreted carefully considering the low numbers of articles published per year (Figure 1). The theoretical shortcoming may partially be explained by the fact that quite a few studies (e.g., Campbell et al. 2011b; Pehlivan, Sarican, and Berthon 2011; Sashittal, Sriramachandramurthy, and Hodis 2012; Waters and Jones 2011) were explorative in nature because advertising in social media was and still is a relatively new phenomenon (Okazaki and Taylor 2013).

As opposed to this, studies incorporating a theoretical framework largely referred to social identity and social influence theories (about 35% of the studies using theory). This seems logical given that social media is characterized by the creation and exchange of content by common users who may influence each other through existing social relationships (Kaplan and Haenlein 2010). Other more frequently applied theoretical frameworks were well-established theories from advertising and persuasion research, such as the elaboration likelihood model (Petty and Cacioppo 1986) or the theory of planned behaviour (Ajzen 1991). In addition, theories from sociology centring around social networks were repeatedly applied (e.g., social exchange theory (Homans 1961); social capital theory (Portes 1998)).

3.4. Methodology and analysis

Regarding research methods, most studies employed surveys (about 41%) whereby most of them were conducted online. The latter seems absolutely logical when one considers that the investigated phenomenon was online in nature. Similarly, most of the 12 experiments included in the review were conducted online. This pattern is probably also due the fact that online research is often more time and cost efficient, as well as the fact that it facilitates the recruitment of participants when compared to offline research (Birnbaum 2004; Reips 2007). Almost matching the number of experimental studies, 11 articles derived their data from content analysis. Since a lot of data can be easily accessed in form of digital texts when it comes to social media advertising (e.g., user comments, website content), quite a few studies employed various forms of automatic content analyses. It can be assumed that this kind of data inquiry is likely increasing in future studies because of its cost and time efficiency as well as because of the amount of data growing day by day. Fewer studies used qualitative methods. Among these, the most frequently used methods were focus groups or unstructured and semi-structured interviews. Interestingly, some of these studies further supported their qualitative findings by conducting additional surveys (e.g., Gironda and Korgaonkar 2014; Strutton, Taylor, and Thompson 2011).

About half of the studies were interested in standard advertising outcomes measuring participants' ad recall, attitudes, and behavioural intentions (Fennis and Stroebe 2010).

Most studies that applied measures for behavioural intentions, like purchase or forwarding intentions, also applied attitude measures, following the reasoning that attitudes predict behaviour (M.S. Kim and Hunter 1993). As opposed to merely measuring intentions, a few studies took advantage of the web's opportunity to track user activities by measuring actual behaviour in response to advertising. For instance, researchers tracked clicks on ads (Y.M. Li, Lee, and Lien 2012), login activity in SNS (Trusov, Bodapati, and Bucklin 2010), watch time of advertising videos (Pashkevich et al. 2013), or page and ad message views (Chatterjee 2011). Although these techniques may be more effortful, they feature the benefits of gathering data in the actual media environment, collecting responses unobtrusively, and being free from any self-reporting bias (Robinson, Wysocka, and Hand 2007). Looking at the content analyses, they were mostly interested in formal and content-related ad characteristics as well as website and profile information.

Most studies that recruited participants for any kind of data collection referred to college students (about 40%). Fewer studies recruited Internet or social media users in general (about 32%), followed by SNS users (about 28%). The strong referral to college students may be explained by the ease of collecting students given the fact that most researchers are related to a university or college. In addition, college-aged users make up a large proportion of social media outlets such as YouTube (Vanden Bergh et al. 2011) or Facebook (Sashittal, Sriramachandramurthy, and Hodis 2012). However, college students are certainly not representative of all social media users when it comes to their education. Furthermore, recent figures show that social media is more and more used by older people (istrategylabs 2014).

Looking at the investigated social media types, more than 60% of the studies dedicated themselves to SNS or SNS users, respectively. Among these, more than half of the articles explicitly referred to Facebook, reflecting the fact that Facebook is currently the most popular SNS worldwide (Vaughan-Nichols 2013). Articles investigating SNS were followed by studies investigating YouTube or YouTube users (about 29%). As mentioned above, these studies can mostly be found in the context of CGA. Five studies referred to social media in general, and two studies investigated MySpace. The latter reflects MySpace's loss of importance, particularly given the steady growth of Facebook in the past years (Barnett 2011). Only two studies compared different social media types, looking at YouTube and Facebook (Dao et al. 2014) as well as MySpace and Facebook (Kelly, Kerr, and Drennan 2010).

In terms of analysis, the majority of articles applied standard methods of statistical analysis, reporting frequencies, t-tests, analysis of variance, or regression analysis. However, studies published more recently increasingly refer to more advanced methods of data analysis such as path analysis or structural equation modeling. It is noteworthy that almost a quarter of the studies reported qualitative analyses, which may be due to the fact that social media is a relative new phenomenon, meaning that quite a few studies were explorative in nature (Kelly, Kerr, and Drennan 2010).

4. General conclusion and research agenda

The goal of the present paper was to review all academic and empirical research dealing with advertising in social media. The present study extended knowledge from existing reviews on online advertising (e.g., Ha 2008; Khang, Ki, and Ye 2012; H. Li 2011) by focusing explicitly on social media, incorporating the latest research (through June 2014), reporting a summary of specific findings and looking at studies' theoretical and methodological foundations. As only two of the 51 articles investigated were published before

2010, this field of research can be considered relatively new. This fact serves to further highlight the relevance of an up-to-date review. Although this field has only recently developed, many articles have been published on the topic; on average, 10 articles per year on advertising in social media were published from 2010 to 2014. As social media is still a relatively new phenomenon and is continually changing, research on the topic is predicted to grow further in the coming years (see also Khang, Ki, and Ye 2012). In this respect, the review concludes by providing future studies assistance, setting a research agenda of seven neglected research topics and three theoretical and methodological issues.

4.1. Neglected research topics

In analysing the findings of 51 journal articles, seven major themes were identified. Given that the field is relatively new, all of these areas would benefit from further research. Specifically, future work could make a contribution by replicating and supporting existing results, extending findings to different settings and samples, and advancing knowledge by specifying boundary conditions or identifying underlying processes. However, the following seven areas are particularly lacking in the existing research.

First, researchers and advertisers are still missing a general empirical overview of how companies and organizations advertise in social media. Although there are three articles dealing with the use of advertising in social media, they all focused on a specific kind of social media, and mostly investigated specific spheres of advertising. Following Lasswell's (1948) segmentation of communication, researchers should therefore ask more generally who is advertising in social media, what kinds of products or brands are advertised in social media, what kinds of advertising vehicles are used, and who is responding how to the advertising. In that way, advertisers would be able to learn about the current practice of social media advertising, and researchers would be able to learn about relevant areas of research.

Second, targeting seems to be an especially fruitful and relevant area for further research. Although social media and particularly SNS are frequently seen as perfect targeting media considering the vast amount of personal information continuously updated by their users (Hoy and Milne 2010; Katz 2014; Kelley, Jugenheimer, and Sheelan 2012), multiple studies have reported that users of social media are presented with irrelevant ads (e.g., Kelly, Kerr, and Drennan 2010; Sashittal, Sriramachandramurthy, and Hodis 2012). Despite the fact that the ads may fit a specific keyword found on a user's profile, the advertised item or cause rarely fits the user's current needs and interests (Villiard and Moreno 2012). Researchers as well as advertisers should therefore seek out more sophisticated ways of deriving current needs and interests from user information. In addition, users' motivations to use social media should be incorporated more fully, ideally matching the advertising methods to these motivations. Alternatively, future research might explore the approach of targeting particularly influential users that may be turned into brand ambassadors, as proposed by Trusov, Bodapati, and Bucklin (2010).

Third, future research should give more attention to the intended influences of advertising on recipients' cognitions, affects, attitudes, and behaviours (Fennis and Stroebe 2010). Although this is one of the areas of most interest to advertisers, very few studies have focused on advertising effects in the sense of looking at specific examples of advertisements and users' responses towards them (Muk 2013). Apart from the studies investigating the effects of CGA, only eight out of the 40 remaining studies dealt with this (Chang, Chen, and Tan 2012; Chatterjee 2011; Y.-M. Li, Lee, and Lien 2012;

Nelson-Field, Riebe, and Sharp 2013; Mabry and Porter 2010; Okazaki, Rubio, and Campo 2013; van Noort, Antheunis, and Verlegh 2014; Walther et al. 2010). Addressing this deficit appropriately requires that attention be given to the defining features of social media, including the social relationships among the users, the creation and exchange of UGC, and users' primary motivation: interacting with other users, and establishing and maintaining social relationships (Kaplan and Haenlein 2010; Ren, Kraut, and Kiesler 2007).

Fourth, future research may also dedicate itself more strongly to 'side effects' or unintended effects of advertising in social media. Existing examples are the study by Pashkevich and colleagues (2013) looking at negative impacts of advertising on users' website satisfaction, or the article by Villiard and Moreno (2012) addressing the issue that targeted SNS advertising may enforce unhealthy nutrition since vulnerable groups may be targeted intentionally or unintentionally. Given the fact that 'using social media websites is among the most common activities of today's children and adolescents' (O'Keeffe, Clarke-Pearson, and Council on Communication and Media 2011), studies should particularly target the youngest users. Their understanding of advertising may not be as advanced when compared to adult or adolescent users. Past research on children and advertising revealed that children do not necessarily comprehend the persuasive intent of advertising and constitute a particularly vulnerable audience, deserving of protection (Kunkel 2001).

Fifth, research does not pay much attention to advertising as *the* economic base for social media sites. Six years ago, Ha (2008) had already asked whether this strong dependency on advertising revenues would affect the content of social media sites, especially since advertisements and content are frequently interrelated. She suggested a comparison of advertising-supported sites versus non-advertising-supported sites, which still seems to be a gainful approach. Furthermore, questions about the best pricing options have to be covered. Next to the traditional cost-per-click (CPC) or cost-per-thousand (CPM) pricing, new options such as cost-per-action or cost-per-engagement might be worth considering. The advertiser would pay each time a user takes a desired action like posting content or playing a game, or each time a user becomes a fan or endorses a brand (Kelley, Jugenheimer, and Sheelan 2012). This also raises the question of how advertising prices are best and most transparently set, since reach and impact measures of traditional media may not be applicable. 'The rapid growth and development of social media has outpaced the industry's understanding of how best to measure' these (Katz 2014, 137).

Sixth, the industry's view on social media advertising is certainly an area worth researching. While there is a lot of research regarding users' attitudes and views on social media advertising, the industry's perspective is missing. Though practitioners discuss social media advertising from their point of view now and then in advertising journals, the community is lacking a systematic and empirically collected overview. Studies in other advertising areas revealed that the industry's view is often far from homogenous – that is, advertisers, marketing managers, media salespeople, and website owners may largely differ in their opinions (Smit, van Reijmersdal, and Neijens 2009). In addition, it would be interesting to know whether the practitioners' perspective matches the academic one (Ha 2008).

Finally, researchers should pay more attention to possible synergies between social media and traditional media. More and more traditionally transported advertising campaigns (e.g., billboards, television, or magazine ads) make direct reference to Facebook sites or YouTube channels by displaying a link or a quick response (QR) code (Sago 2011). According to Okazaki and Hirose (2012), social media users have been a key driver of this growth, acting as early adopters. If interested in an advertisement, consumers directly access a related site by typing the link or scanning the code with their

smartphone. In that way, formerly impersonal advertising messages can be extended to personal brand−consumer interactions, offering audiovisual brand experiences and interactivity in addition (Dou and Li 2008). Keeping in mind that more than half of the US mobile phones have become smartphones, with a growing number of people primarily accessing the Internet via their mobile device, advertisers are able to engage vast audiences in this kind of communication (Katz 2014). Researchers may further investigate whether or not these kind of advertising extensions are accepted and used by the audience (Jung, Somerstein, and Kwon 2011), whether advertising effects can actually be enhanced through this kind of communication (Okazaki, Rubio, and Campo 2012), and whether the role of billboard or print advertising may be reduced to creating awareness and interest while the actual persuasion takes place in social media. Although there are already some studies looking at synergies between offline and online advertising, a lot of them date from times in which accessing online content encountered in offline media was much more complicated and social media had just started to develop as mass media (Ha 2008).

4.2. Use of theory

As mentioned before, about 45% of the articles included in the review did not make explicit reference to a specific theory, nor did they derive testable hypotheses from that theory. Instead, the articles frequently focused directly on specific research questions and failed to transfer the object of interest to a more abstract level. Furthermore, those studies that did apply theory were very rarely aimed at advancing theoretical knowledge (an exception is, for example, Schumann, von Wangenheim, and Groene 2014). As a result, similarly to market research, the findings often seem applicable only to a specific kind of social media, specific samples, and specific situations, because they are not integrated in a more general theoretical framework. This phenomenon-driven research has serious consequences for this field of study, as the findings are at risk of being outdated relatively soon given the current fast pace of development in online communication technologies (Spears et al. 2011). We have to ask ourselves ‘how will we explain it in such a way that we do not have to abandon explanations when the next killer app comes along’ (Walther 2009, 751). Therefore, it is crucial that future studies develop research questions on a more abstract level, and deduce hypotheses from well-modeled theoretical foundations (see Walther and Jang 2012 for a discussion of similar deficits and recommendations in other areas of social media research).

Looking at the theoretical framework most frequently applied, social influence theories from social psychology seem to be a fruitful approach, living up to the social character of social media. Specifically, social media users are commonly exposed to multiple sources of influence when surfing the web, including institutionally authored messages (e.g., advertising) as well as peer information sources (e.g., comments, CGA). As a result, users may perceive several types of information sources regarding the same topic (e.g., a brand) and are possibly influenced by not only a single source, but by the interplay among multiple sources (Walther et al. 2011). Walther, Tom Tong and colleagues (2011) suggest that all of these should be regarded as social agents which influence the encountering users. In addition, social media users frequently share social relationships with information sources they are exposed to (interpersonal relationships as well as common group memberships; Ellison, Steinfield, and Lampe 2007). As a result, users are highly likely to be influenced precisely through these relationships. Social influence theories such as social identity model of deindividuation effects (SIDE) (Spears and Lea 1992) or the social identity approach are regarded as appropriate representations of these processes and may be applied in future studies (Walther et al. 2011).

4.3. Assessing causal relationships and measuring actual behaviour

In terms of the methodology applied, most of the reviewed studies made use of single surveys. Although this mode of data collection may be appropriate for researching topics such as the acceptance of advertising or users' motivations, it carries significant risks when authors wish to make causal assertions (Shaughnessy and Zechmeister 1997). Although many of the reviewed studies made such assertions, these were mostly verified by referring to correlational survey data instead of data collected through panel or experimental designs. It is consequently often impossible to tell cause from effect, or whether correlations are merely spurious. Less ambiguous research methods should be applied when making statements about causal relationships in studies to come.

Future studies may also look deeper into measuring actual behaviour instead of behavioural intentions when interested in conative outcomes like forwarding an ad message or purchasing a product. The former seems especially feasible considering that studies are frequently conducted online or in computer labs. Participants could be presented with an interactive web interface through a survey or an experiment featuring the possibility to forward an advertisement to friend. Participants may also be presented with interactive advertisements and researchers may measure ad clicks or whether or not participants click on links providing additional information (Y.-M. Li, Lee, and Lien 2012). So far, four out of 20 studies interested in behavioural responses to advertisements applied tracking methods. Given the mentioned benefits of gathering data in the actual media environment, collecting responses unobtrusively, and being free from any self-reporting bias (Robinson, Wysocka, and Hand 2007) this number will hopefully increase in studies to come.

4.4. Non-student samples

Last but not least, future studies should rely less on student samples. As stated before, more than 40% of the studies referred to convenient samples in the form of college students. Although students represent large proportions of social media users (Sashittal, Sriramachandramurthy, and Hodis 2012; Vanden Bergh et al. 2011), they are certainly not representative of all social media users. As a result, findings may be limited to certain populations. This is particularly true when assumed influences on dependent variables interact with participants' characteristics (Oakes 1972). Previous research was, for instance, able to show that people's attitudes towards advertising differ in terms of their education and age. Less educated and younger persons reported more favourable attitudes (Shavitt, Lowrey, and Haefner 1998). These findings may transfer to advertising in social media and limit some of the existing findings given that, for instance, more and more older people join Facebook while teenagers and college students drop out (istrategylabs 2014).

5. Limitations

Although the present study aimed at reviewing all empirical research pertaining to advertising in social media, and searched for a broad range of keywords, we cannot be certain that the 51 articles identified represent the full range of relevant research publications. It is possible that some articles related to advertising in social media were not captured by the search terms, and other relevant articles might not have been part of the searched databases. In addition, the present study adopted a rather narrow definition of advertising as

persuasive and planned communication by advertising professionals deliberately placed on third-party websites, thus excluding research on product reviews and brand conversations unrelated to advertising. I suggest conducting an additional review explicitly focusing on this type of communication as there are certainly enough studies dedicating themselves to this kind of brand user communication.

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