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# **WHY DO INDIVIDUALS AVOID SOCIAL MEDIA ADVERTISING: A QUALITATIVE COMPARISON ANALYSIS STUDY**

*Research paper*

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## **Abstract**

Companies spend billions of dollars in social media advertising, yet some social media users actively avoid social media advertising for instance by scrolling over ads. To understand that, this research builds upon the advertising avoidance model and applies a qualitative comparison analysis (QCA) to identify configurations of perceptions of avoidance. We reveal disruption, distraction, excessiveness and lack of incentive as perceptions that are necessary — yet not sufficient for evoking the avoidance of social media advertising. Furthermore, we reveal three distinct configurations of perceptions that are sufficient and lead to avoidance of social media advertising. This research contributes by uncovering the influence of configurations on social media advertising avoidance and companies can use these findings to reduce the effect of social media users actively avoiding social media advertising.

*Keywords: Advertising avoidance, Online advertising, Qualitative comparison analysis (QCA), resistance, perceived goal impediment, perceived ad clutter, perceived negative experience*

## **1 Introduction**

Companies around the world spend about 40 billion USD on social media advertising (SMA) and will further rise their investments to more than 50 billion USD in 2020 (Fortune 2016; Statista 2017). Despite that increase in spending, companies still face barriers in realizing the desired returns on their investment, such as the generation of clicks or the improvement of their online product prominence (Kohli et al. 2015). One major reason for these barriers lies in the social media users' avoidance of SMA (Kelly et al. 2010), for example scrolling over ads, presented on the social media site. To overcome these barriers and to decrease the avoidance of SMA, companies need to adapt their SMA activities in accordance to social media users' needs. Therefore, companies need to understand why social media users actively avoid SMA, thus which configurations of perceptions lead to SMA avoidance, to address these barriers and to realize their desired returns.

The avoidance of online advertising has already been studied in prior research (Cho and Cheon 2004; Edwards et al. 2002). Among others, the advertising avoidance model (AAM) (Cho and Cheon 2004) provides evidence that social media users avoid advertising as they feel impeded from getting information from the online environment. Furthermore, social media users' perception of online advertising being omnipresent and social media users' prior negative experiences with online advertising lead to avoidance of online advertising. Thus, the AAM identifies three main concepts, which are driving social media users' avoidance: *perceived goal impediment*, *perceived ad clutter* and *prior negative experience*. Those main concepts compose three perceptions each, thus nine perceptions in total, which provides us with a good overview of relevant perceptions for SMA avoidance: *search hindrance*, *disruption*, *distraction*, *excessiveness*, *exclusiveness*, *irritation*, *dissatisfaction*, *lack of incentive* and *lack of utility*.

However, the AAM does not supply us with any insights into how each of the nine perceptions influences social media users' SMA avoidance individually, detached from the main concepts, nor if the influence of one perception alone or the influence of a configuration of several perceptions lead to social media users SMA avoidance. For example, we do not know if the sheer presence of *dissatisfaction* with SMA is already enough for social media users to avoid SMA or if social media users only avoid SMA when they are *dissatisfied* and additionally perceive SMA as *irritating*. Therefore, we need to understand the interplay of the identified nine perceptions, to provide configurations of those perceptions that lead to avoidance of SMA. As these insights could provide a detailed knowledge about SMA avoidance and could help companies to decrease SMA avoidance, we aim to respond to the following research question:

**Which configurations of perceptions lead to social media users' avoidance of social media advertising?**

To answer the research question, we base on the AAM (Cho and Cheon 2004) and apply a Qualitative Comparison Approach (QCA) (Ragin 2000, 2006a), which has attracted the more and more attention in IS literature (El Sawy et al. 2010) to reveal configurations of perceptions resulting in social media users' SMA avoidance. QCA is especially well-suited for gaining a deeper understanding of dynamic interactions in a complex environment (El Sawy et al. 2010), as this method takes into account that a complex object of interest is rarely caused by one or more independent influencing factors, but by an interplay of influencing factors (conjunction). Further, one specific influencing factor can either have a positive or a negative impact on the object of interest (asymmetry) depending on its interplay with other influencing factors, building a configuration (Misangyi et al. 2017). Most important, QCA allows us to study how different configurations of perceptions lead social media users' SMA avoidance. This means, that individuals avoid SMA for distinct reasons, e.g. starting with different perceptions about SMA and following different paths, which all lead to avoidance of SMA. Therefore, we contribute to theory by explaining social media users' SMA avoidance with three identified configurations of perceptions and prove the equifinality of SMA avoidance. This research also contributes to practice, by revealing alternative configurations of how ads can evoke SMA avoidance and thereby pave the way to reduce avoidance of SMA.

We structure the manuscript as follows: In Section 2, we will outline the theoretical background of avoidance and explain the AAM. Section 3 will explain our research methodology followed by a brief overview of the findings in Section 4. Then, we will discuss the theoretical and practical contributions in Section 5 and finish with future research and conclusion in Section 6.

## **2 Theoretical Background**

As our research focuses on explaining configurations resulting in advertising avoidance, we introduce first the causes of advertising avoidance by outlining the advertising avoidance model (AAM). We define all perceptions identified by the AAM and explain their role for and their effect on social media users' avoidance of AAM.

### **2.1 Advertising Avoidance**

Advertising avoidance, defined as "*all actions by media users that differentially reduce their exposure to ad content*" (Speck and Elliott 1997 p. 61), has already been studied from many different perspectives, treating many different types of advertising, which could be avoided. Thereby, social media users' avoidance of advertising has evolved along with the advertising technologies.

Early studies showed that avoidance of television or radio advertising ranged from ignorance to individuals leaving the room or changing the radio station during the commercial break (Clancey 1994; Elliott and Speck 1998; Speck and Elliott 1997). With the introduction of online advertising, individuals could either ignore the displayed ads, like banner or pop-up ads, or click them away to avoid online advertising (Cho and Cheon 2004; Edwards et al. 2002). Nowadays, in the age of social media advertising (SMA),

social media sites use ‘native’ ads, which are embedded into the social media site’s background structure, such as the news feed, and match the appearance of the displayed content of the social media site, such as posts or shares. This means, that SMA does not differ in design from other elements in the social media site. Based on prior definitions of avoidance (Speck and Elliott 1997), we define avoidance of SMA as *all actions of social media users that reduce their exposure to SMA*. Therefore, social media users can either not pay attention to the ads or scroll them down to avoid them. The AAM identifies an affective, a cognitive and a behavioral component of avoidance. As we focus on the avoidance of SMA, such as scrolling over ads, we only consider behavioral avoidance as object of interest. To examine social media users’ avoidance of SMA, we will next outline the AAM (Cho and Cheon 2004) and present the identified perceptions influencing SMA avoidance.

## 2.2 The advertising avoidance model

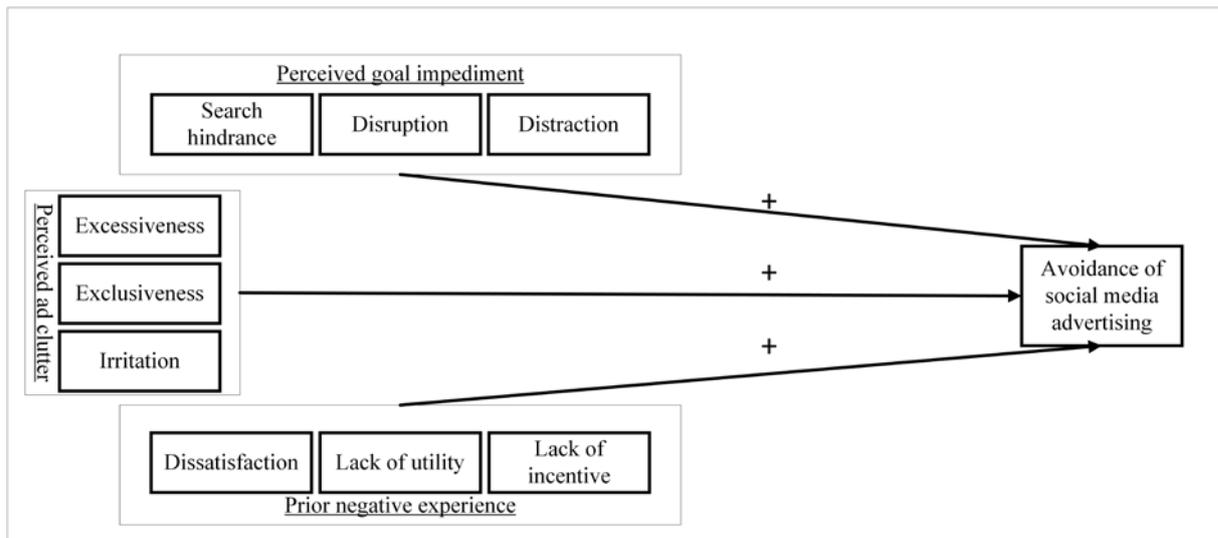


Figure 1. The Advertising Avoidance Model (Cho and Cheon 2004)

As presented in Figure 1, the AAM (Cho and Cheon 2004) identifies three main concepts influencing social media users’ advertising avoidance: perceived goal impediment, perceived advertising clutter and prior negative experience. The positive influence (indicated by ‘+’) of each main concept on social media users’ SMA avoidance is symbolized by an arrow (see Figure 1). As this research aims at providing configurations of perceptions resulting in social media users’ SMA avoidance, we split up these main concepts into the nine perceptions, which are explained hereafter.

The first main concept *perceived goal impediment* steams from the information theory (Shannon and Weaver 1998), which describes advertising as a form of perturbation that averts social media users from performing the desired activity, which yields avoidance. According to the AAM (Cho and Cheon 2004), perceived goal impediment positively influences avoidance and consists of three perceptions, namely: *search hindrance*, *disruption* and *distraction*. Based on prior research (Cho and Cheon 2004; Edwards et al. 2002), search hindrance refers to SMA averting social media users from searching and finding their actual desired information within the social media environment. Disruption is described as social media users’ discontinuation of their current task due to advertising (Speck and Elliott 1997) and distraction as the feeling of being deviated from current activities (Speck and Elliott 1997).

The second main concept, *perceived ad clutter*, also steams from information theory (Shannon and Weaver 1998) referring to the overwhelming amount of ads an individual is exposed to, which results in avoidance (Elliott and Speck 1998). Perceived ad clutter positively influences avoidance and consists of the three perceptions of *excessiveness*, *exclusiveness* and *irritation* (Cho and Cheon 2004). Excessiveness refers to the perceived amount of ads within the social media environment (Elliott and Speck 1998), exclusiveness points to the perception of social media sites primarily acting as an advertising

medium (Cho and Cheon 2004) and irritation captures social media users' characterization of advertising as intrusive, exuberantly recurring (Edwards et al. 2002) and over-manipulative (Ducoffe 1996).

The third main concept, *prior negative experience*, draws on the experience theory (Kolb 1984), stating that prior negative experiences influence social media users' behavior. According to the AAM (Cho and Cheon 2004), social media users' empirical knowledge about SMA influences social media users' information processing of SMA as well as social media users' behavior, thus the avoidance of SMA. Therefore, this concept positively influences avoidance and consists of the following three perceptions: *dissatisfaction*, *lack of utility* and *lack of incentive* (Cho and Cheon 2004). In the context of SMA, dissatisfaction captures social media users' overall evaluating, affective response to their prior negative experiences with SMA, thus the emotional reaction to advertising not fulfilling prior expectations (Oliver 1980). The lack of utility is defined as the extent to which social media users have experienced SMA as not being useful for their purchasing decision or their search for product information (Cho and Cheon 2004). The lack of incentive captures social media users' prior evaluations of ads offering no or inadequate incentives not to avoid them (Cho and Cheon 2004). More precisely, the reaction to ads did not yield any benefits and therefore, social media users avoid them (Cho and Cheon 2004).

In sum, the AAM identifies three main concepts, which we split up into the underlying nine perceptions. However, the AAM does not supply any information on the interplay of the identified nine perceptions. For instance, we lack an understanding how perceptions focusing on personal experience, such as dissatisfaction and lack of incentive, and perceptions addressing the SMA itself, such as disruption and irritation, interact and lead to avoidance of SMA. Therefore, we need to apply configurational methods such as the Qualitative Comparison Analysis (QCA) (Rihoux and Ragin 2009). We use QCA, to reveal which configurations of perceptions lead to social media users' avoidance of SMA. This means we can uncover, which perceptions need to be present or absent in a configuration, so that social media users avoid SMA, which will help to adapt the design of advertising to social media users' needs, so that they do not avoid SMA. With this we follow a neo-configurational approach, using fuzzy set QCA (Misangyi et al. 2017), which complements existing research focusing on linear relationships of advertising avoidance. So far research has not addressed causal complexity, including conjunction, equifinality and asymmetry of individuals response so social media advertising (Misangyi et al. 2017; Park et al. 2017). Taking a QCA approach therefore enables us to study social media users' behavior in terms of configurations of conditions. Therefore, we will next outline our methodology and explain our research method and data analysis.

### **3 Research Methodology**

This section provides a detailed description of our research methodology. As we want to know about the configurations of perceptions yielding SMA avoidance, we need to apply a configurational approach, here QCA, which is explained in detail within this section. To specify our research attempt, we further outline the data collection procedure, we used in our QCA data analysis and the validation of our approach.

#### **3.1 Data Collection**

To test the influence of the perceptions on social media advertising (SMA) avoidance, we prepared an online survey and used a crowdsourcing platform as source for participants. The data collection was conducted in November 2017, using Amazon Mechanical Turk (mTurk), where participants are paid for completing small tasks, such as taking part in an online survey. The data collection approach based on mTurk has become established within IS research (Steelman et al. 2014). One major benefit of mTurk is to get a broad spectrum of participants, which can improve the generalizability of the study and can therefore be considered to be equivalent to traditional data collection approaches (Lowry et al. 2016). Each participant received \$ 0.15 for successfully filling out the survey. To assure a high quality data collection, we followed design procedures of prior literature, discussing the application of mTurk (Lowry et al. 2016; Steelman et al. 2014). For instance, we used reverse coded questions, screening

questions and attention tests in the survey. We furthermore only tolerated participants, who have had a high ratio of successful completed tasks. As we want to study social media users' avoidance in social media, we conducted the study using the example of Facebook. Facebook is dominating the social media landscape and the largest portion of SMA spending is allocated to Facebook (eMarketer 2016). Furthermore, Facebook has been used successfully as an example environment to study social media users' behavior in social media (Krasnova et al. 2010; Laumer et al. 2010; Maier et al. 2012). Therefore, we just sought for participants that were active Facebook users at that time and used screening question to assure that the participants were Facebook users. Overall, 168 social media users took part in the survey, yet we only ended up with 118 participants who passed the screening questions, the attention tests and reverse coded items. For instance, we removed 29 participants as they failed reverse coded items, 15 participants were removed as they failed the implemented attention tests. Six participants were removed as their overall time for completing the survey was less than two minutes, which indicates that they did not answer the questions conscientiously. The average age of the participants is 33.40 and 53.39 percent of the participants are female.

		M	SD	AVE	CR	$\alpha$	1	2	3	4	5	6	7	8	9	10
1	Avoidance	4.30	1.38	0.56	0.86	0.80	0.75									
2	Lack of incentive	5.32	1.38	0.78	0.91	0.86	0.52	0.88								
3	Lack of utility	3.75	1.61	0.81	0.93	0.88	-0.23	-0.29	0.90							
4	Disruption	4.89	1.42	0.84	0.94	0.91	0.63	0.62	-0.40	0.92						
5	Dissatisfaction	3.95	1.51	0.90	0.97	0.95	-0.29	-0.28	0.61	-0.41	0.95					
6	Distraction	4.68	1.40	0.77	0.91	0.85	0.56	0.60	-0.26	0.84	-0.37	0.88				
7	Excessiveness	4.92	1.52	0.85	0.92	0.82	0.60	0.60	-0.33	0.77	-0.35	0.71	0.92			
8	Exclusiveness	3.72	1.58	0.82	0.91	0.81	0.32	0.09	0.20	0.24	0.07	0.32	0.34	1.00		
9	Irritation	4.22	1.44	0.69	0.92	0.88	0.48	0.46	-0.37	0.66	-0.44	0.62	0.64	0.10	0.83	
10	Search hindrance	4.76	1.53	0.89	0.96	0.94	0.58	0.57	-0.43	0.79	-0.29	0.72	0.70	0.17	0.61	0.95

Note: square root of AVE is listed on the diagonal of bivariate correlations; M = mean, SD = standard deviation; AVE = average variance extracted; CR = composite reliability;  $\alpha$  = Cronbach's alpha

Table 1 Descriptive Statistics and Discriminant Validity

The constructs were measured on a 7-point Likert scale as shown in the Appendix (Table 3). To measure excessiveness, exclusiveness, lack of utility, lack of incentive, search hindrance, disruption, distraction and avoidance, we drew on the measures of the original AAM (Cho and Cheon 2004). Further, we adapted the measures for dissatisfaction (Bhattacharjee and Park 2014) and irritation (Ducoffe 1996) from previous research, to ensure content validity. To assess the validity and reliability of the construct measures, we tested for Cronbach's alpha, conducted a rotated factor analysis and computed composite reliability scores and the average variances extracted. Cronbach's alpha ranges from 0.80 to 0.95 (see Table 1) and therefore, exceeds the threshold of 0.70 (Nunnally 1978). Additionally, the loadings were greater than 0.70 (see Table 3). The composite reliability score ranges from 0.86 to 0.96 (see Table 1) and exceeds the minimum value required of 0.70 (Bagozzi and Yi 1988). The average variance extracted also exceeds the minimum threshold of 0.50 as it ranges from 0.56 to 0.90 (see Table 1). Overall these tests attest construct reliability (Bagozzi 1979). Furthermore, based on prior literature (Pavlou et al. 2007), we examined the correlations presented in Table 1, which also shows the descriptive statistics and the discriminant validity for all measures.

### 3.2 Data Analysis Using QCA

As a linear analysis of the data would not sufficiently answer our research question, which asks about different configurations of perceptions influencing social media users' avoidance of SMA, we applied a Qualitative Comparison Analysis (QCA), as a configurational approach (Ragin 2000). QCA is a configurational analysis based on set theory that empirically examines the relationship between groups of conditions and an outcome of interest (Fiss 2011; Ragin 2000). QCA has been applied for explaining complex individual behavior before (Müller et al. 2017). Configurations are instances of the studied phenomenon, in which the different conditions and the outcome of interest are observed (Ragin 2006a).

In this study, conditions refer to the perceptions bringing about avoidance and outcome refers to avoidance of SMA. Consequently, in this study configurations refer to a combination of perceptions that may or may not lead to avoidance of SMA. Therefore, QCA allows us to understand social media users' avoidance of SMA from the configurations of perceptions.

There are three main types of QCA used in research, namely crisp-set QCA (csQCA), multi value-QCA (mvQCA) and fuzzy-set QCA (fsQCA). When using a csQCA the conditions are coded binary, mvQCA uses more than two values to code conditions and fsQCA allow conditions to have any desired value between 0 and 1 (Schneider and Wagemann 2010). As fsQCA has the advantage of using fuzzy values instead of fixed values and thereby reducing the loss of information (Ragin 2000), we choose to use fsQCA. FsQCA was of special interest for research in a variety of domains over the last years, since it allows and enables us to gain a deeper holistic view on the object of interest (Misangyi et al. 2017).

To analyze the connection between conditions and the outcome, fsQCA uses Boolean algebra to identify necessary and sufficient conditions for the outcome. Necessary conditions are those conditions that are always present if the outcome is present (Ragin 2006b). Sufficient conditions are defined as conditions that can bring about an outcome. This means that if the sufficient condition is present the outcome needs to be present as well (Ragin 2006b). This concept of sufficient conditions is not only applied to single conditions but to configurations of conditions.

The rationale for choosing this method is based on two main benefits of configurational approaches especially of QCA (El Sawy et al. 2010). First, as we want to understand which configuration of perceptions result in avoidance of SMA, we use QCA where the perceptions are understood as conditions explaining social media users' avoidance — in QCA called outcome. Therefore, QCA enables to study the outcome as the result of the configuration of conditions (Ragin 2000; Rihoux and Ragin 2009). To further understand the configuration of conditions, QCA allows for identifying core conditions, indicating a strong influence on the outcome, and peripheral conditions, indicating a weak influence on the outcome (El Sawy et al. 2010; Fiss 2007, 2011). Second, as we aim to understand the configuration of perceptions resulting in avoidance of SMA, we want to reveal whether there are multiple configurations of perceptions leading to avoidance of SMA. QCA enables the analysis of equifinality, meaning that different combinations of conditions may yield the same outcome (El Sawy et al. 2010; Fiss 2007; Ragin 2006b). This enables to study various paths that lead to avoidance of SMA.

Originally QCA was developed for sociology and political science to study macro-level phenomena using a small number of cases (Ragin 2006a). Yet, QCA has been applied to study phenomena on individual-level using larger number of cases (Müller et al. 2017). Additionally, QCA has been successfully applied in IS research before (Park et al. 2017). Our research also conduces to IS research by explaining SMA avoidance using the configurational approach of fsQCA. In contrast to linear-algebraic methods, such as structural equation modelling, fsQCA respects the equifinality of outcomes, meaning that complex phenomena, such as SMA avoidance, rarely depend on one or more independent influencing factors but on the interplay of these influencing factors, here perceptions (Ragin 2006b, 2007). Further, fsQCA takes into account that a specific influencing factor can have either a positive or a negative impact on the outcome. Therefore, fsQCA helps us to decompose correlations between influencing factors and outcome and thus, complements the knowledge gained from existing approaches.

### **3.3 Data Analysis**

The data analysis consists of three parts. The **calibration** of the raw data received from the surveys into fuzzy sets, the **analysis for necessary conditions** and the **analysis for sufficient conditions**. For all three parts, we use the software provided by Ragin (2006a).

**Calibration.** To transform the measures, which we received from the interval scale values from the survey, into fuzzy sets, we apply the calibration process. In line with QCA literature, we define three qualitative anchors for processing the calibration. The first anchor defines the threshold for full membership in a set, the second anchor the threshold for full non-membership in a set. Finally, we define a

third anchor, which defines the crossover point, meaning the point of maximum ambiguity. As all conditions and the outcome are measured on a 7-point Likert scale, we set the first anchor for full membership at value 7 and the threshold for full non-membership as value 1. We set the value for the crossover point to the value 4. As recommended in literature (Ragin 2007), we apply the direct method of calibration, which uses the defined anchors and transform the interval scale into fuzzy set values. As the mechanism of fuzzy set makes it difficult to analyze fuzzy sets with score of exactly 0.50 we followed recommendations from literature (Ragin and Fiss 2008) to avoid the use of 0.50 score for conditions. Therefore, we added a constant of 0.001 to conditions below a full membership score. This process assures that no cases are dropped from the fuzzy set analyses and is often applied in QCA studies (Fiss 2011). This calibration was performed for the conditions and the outcomes. We calibrated each of the 118 surveys into 118 numeric configurations.

**Analysis for necessary conditions.** The next step of an fsQCA analysis is the analysis for necessary conditions. Necessary condition mean, that the condition is always present if the outcome is present (Ragin 2000). In the analysis for necessary conditions, the decisive number is the consistency, indicating the degree to which cases with the same conditions display the same outcome (Rihoux and Ragin 2009). In line with thresholds recommended in QCA literature, we set the consistency threshold to 0.90 (Schneider and Wagemann 2010). This means that conditions need to exceed this threshold to be classified as necessary condition.

**Analysis for sufficient conditions.** In this part of an fsQCA analysis, we analyzed for sufficient conditions. Sufficient conditions result inevitably in the outcome, meaning that if the sufficient conditions are present, the outcome is present as well. The analysis of sufficient conditions involves three steps (Fiss 2011; Ragin 2000, 2006b): construction of the truth table, preparation of the truth table and analysis of the truth table.

First, the construction of the truth table is conducted. We constructed the truth table by listing all possible combinations of conditions, ergo  $2^k$  combinations with  $k$  being the number of combinations. In our study, we consider nine conditions, thus, with  $k=9$ , our truth table consists of 512 rows with each row displaying a specific configuration of combinations.

Second, the truth table is then reduced based on the frequency of configurations. We use a frequency threshold of three (Ragin 2007), which is appropriate for studying nine conditions (Maggetti and Levi-Faur 2013). Through applying this threshold, all configurations with less than three occurrences are dropped. For the rest, we applied a minimum acceptable level of consistency which needs to be exceeded. Again, consistency is a measure for how closely the set relation is approximated, meaning the degree to which the same configurations display the same outcome (Ragin 2000). We set this consistency threshold to 0.85, which is higher than the recommended threshold of 0.80, as a higher threshold leads to more reliable results (Schneider and Wagemann 2010). Configurations that exceed the consistency threshold are regarded as sufficient configurations for the outcome.

Third, we apply the Quine-McCluskey algorithm (Ragin 2006b), which simplifies set-theoretic statements and produces a simplified solution formula to describe the underlying patterns of the truth table (Ragin 2007). Specifically, this solution formula depicts configurations of conditions that are sufficient to invoke social media users coping responses. To further analyze the solution formula, we draw on prior research (Fiss 2011) and distinguish between core conditions, indicating a strong causal link with the outcome of questions, and peripheral conditions, indicating a weaker causal relationship with the outcome of interest. The distinction of these conditions enables to further reveal the effects of the condition in the configurations and to better understand the configurations of perceptions resulting in social media users' avoidance.

### 3.4 Validation

**Sensitivity to sample.** As QCA involves examining all possible combinations of conditions, the number of possible combinations increases exponentially the more combinations are examined. As more conditions result in more possible combinations of configurations, a higher number of cases is required for a higher number of conditions. Therefore, we test our number of cases to the recommended ratio of conditions to cases. According to recommendations (Marx 2006), the ratio of conditions to cases should be below ratio of 0.20. This means that for nine conditions, minimum 45 cases are needed. In our study, we have 118 cases and consequently exceed the minimum number of cases. To furthermore ensure the robustness of our solution formula, we additionally validated our results. We use a frequency threshold of three for this study, meaning that configurations with less than three observations are dropped from the result. Yet, to ensure the robustness of our results to the used frequency threshold, we conduct a robustness checks suggested in QCA literature (Maggetti and Levi-Faur 2013; Ordanini et al. 2014; Schneider and Wagemann 2010). To test the sensitivity to the sample, it is recommended to repeat the analysis for sufficient conditions with a higher frequency threshold. For ascertain the sensitivity of your solution term, we used a threshold of five instead of three. This means that configurations having less than five observations are dropped from the truth table. This repeated analysis yielded the same solution formula, which attests the solution formula's stability.

**Sensitivity to calibration.** The result of the analysis is based on the calibration process where three different thresholds are used. The threshold for full membership, the threshold for full non-membership and the threshold of maximum ambiguity. Those thresholds determine whether a fuzzy value of a condition is in a full membership or full non-membership of a condition. Although our calibration process is based on QCA literature (Ragin 2000; Schneider and Wagemann 2010), we conduct additional robustness checks for our solution formula by varying the thresholds. As we already set the thresholds to the minimum and the maximum of the Likert-scale we changed the threshold of maximum ambiguity. We changed the threshold, originally 4, to 3.5 and 4.5 in separate analyses. The separate analyses yielded the same result then the original solution formula, which proves the robustness of the solution formula.

## 4 Findings

In this section, we will outline the findings for the necessary conditions first, followed by the results of sufficient conditions that explain social media users' avoidance of social media advertising (SMA).

**Necessary conditions.** Table 2 illustrates the results of the analysis of necessary conditions, indicating the absence of a condition or outcome with '~'. Further, Table 2 provides us with consistency and coverage scores for each condition.

The consistency scores for the outcome avoidance of SMA range between 0.36 and 0.94 (see Table 2). The presence of *disruption*, *distraction*, *excessiveness* and *lack of incentive* exceed the required consistency threshold of 0.90. All four conditions depict a necessary condition for causing social media users to avoid SMA. This means that these four conditions are always present if social media users avoid SMA. Yet, this does not imply that these conditions bring about the avoidance of SMA, as this is part of the analysis of sufficient conditions.

**Sufficient conditions.** The analysis of sufficient conditions aims at the identification of configurations resulting in the avoidance of SMA, as there cannot be any case where these configurations are present but not resulting in the outcome of interest. As described above, the analysis for sufficient conditions yields the solution formula. The solution formula is summarized in the following Boolean expression (see Figure 2), where '\*' depicts the logical and, '+' indicates the logical or, '~' represents the absence of a condition and '→' denotes the logical implication operator (Fiss 2007).

The solution formula reveals three alternative configurations resulting in social media users' avoidance of SMA. For readability reasons, we draw on the graphical notation of the solution formula (Ragin and Fiss 2008), which is presented in Figure 3.

Conditions	Avoidance	
	Consistency	Coverage
Search hindrance	0.88	0.78
~Search hindrance	0.44	0.67
<b>Disruption</b>	<b>0.92</b>	0.78
~Disruption	0.41	0.69
<b>Distraction</b>	<b>0.90</b>	0.80
~Distraction	0.47	0.71
<b>Excessiveness</b>	<b>0.91</b>	0.77
~ Excessiveness	0.41	0.69
Exclusiveness	0.65	0.81
~ Exclusiveness	0.69	0.70
Irritation	0.83	0.85
~ Irritation	0.55	0.69
Dissatisfaction	0.63	0.71
~ Dissatisfaction	0.74	0.82
Lack of utility	0.59	0.71
~ Lack of utility	0.76	0.79
<b>Lack of incentive</b>	<b>0.94</b>	0.72
~ Lack of incentive	0.36	0.75

*Note: ~ indicates the absence of a condition or outcome; necessity consistency threshold = 0.90; conditions exceeding the consistency threshold are marked as bold*

Table 2 Necessary Conditions

<p>Search hindrance * Disruption * Distraction * Excessiveness * Irritation * ~Lack of utility * Lack of incentive +                  Search hindrance * Disruption * Distraction * Excessiveness * Irritation * Dissatisfaction * Lack of incentive +                  Search hindrance * Disruption * Distraction * Excessiveness * Exclusiveness * Dissatisfaction * Lack of utility * Lack of incentive                  → Avoidance of social media advertising</p>
<p><i>Note: * indicates the logical 'and'; + represents the logical 'or'; ~ indicates the absence of a particular condition; '→' denotes the logical implication operator.</i></p>

Figure 2 Solution Formula for Sufficient Conditions

Each configuration — separated by '+' in the solution formula — has been transformed into one column of the table. We translate the configurations using black circles (●) indicating the presence of a condition and white circles (○) to indicate the absence of a condition. Blank spaces indicate a “don't care” situation, in which the condition may be either present or absent and therefore, plays a subordinated role in the configuration. We translated core conditions using large circles and periphery conditions are displayed by small circles (Fiss 2011). The solution coverage of 0.74 indicates the degree of how much of the outcome is covered by the three configurations. Therefore, the three configurations account for about 74 percent of the membership in the outcome, which depicts a high explanatory power of the solution formula. The solution consistency of 0.90 as well as the consistency of each configuration exceeds the minimum value of 0.80, which is recommended in QCA literature (Schneider and Wagemann 2010). The raw coverage of the three configurations ranges from 0.40 to 0.61, expressing the “proportion of membership in the outcome explained by each term of the solution” (Ragin 2006b p. 86), this means that raw coverage depicts the extent to which the configuration covers the cases of the outcome. The three unique coverage values, explaining the unique contribution of the configuration excluding the

contribution of other configurations, range from 0.01 to 0.22 and therefore exceed the value of 0, indicating that each configuration contributes to the explanation of the outcome (Ragin 2006a).

Overall, the solution reveals three core conditions in the three configurations. *Search hindrance*, *disruption* and *distraction* depict a core conditions and thereby revealing a strong causal link for explaining avoidance of SMA. To get a more detailed view on the results, we treat each configuration separately. Configuration 1 encompasses the presence of *search hindrance*, *disruption*, *distraction*, *excessiveness* and *irritation*, the absence of a *lack of utility* and the presence of a *lack of incentive*. *Exclusiveness* and *dissatisfaction* have a subordinate role, they can either be present or absent. In this configuration, *lack of utility* even has a negative impact on SMA avoidance, as only the absence of this perception yields in SMA avoidance and therefore, the higher the perceived lack of utility the unlikelyer the emergence of SMA avoidance. In comparison to the other configurations, configuration 1 achieves the highest raw coverage score and the highest unique score, meaning that this configuration alone explains the avoidance to a higher extend than the other configurations. It furthermore shows that this configuration has by far the highest relative importance for explaining social media users' avoidance of SMA. Configuration 2 presents a configuration with the presence of *search hindrance*, *disruption*, *distraction*, *excessiveness*, *irritation*, *dissatisfaction* and *lack of incentive*. *Exclusiveness* and *lack of utility* play a subordinate role. In configuration 3, all conditions except *irritation* are present. *Irritation* plays a subordinate role, as it can either be present or absent. To further assess those results, we discuss them in the next section, providing theoretical and practical contributions, as well as future research attempts.

Configuration		Configuration 1	Configuration 2	Configuration 3
Conditions	Search hindrance	●	●	●
	Disruption	●	●	●
	Distraction	●	●	●
	Excessiveness	●	●	●
	Exclusiveness			●
	Irritation	●	●	
	Dissatisfaction		●	●
	Lack of utility	⊗		●
	Lack of incentive	●	●	●
Raw coverage	0.61	0.49	0.40	
Unique coverage	0.22	0.01	0.03	
Consistency	0.92	0.93	0.91	
Solution coverage	0.74			
Solution consistency	0.90			

*Note:*  
 presence of a condition: ● ;  
 absence of a condition ⊗ ;  
 core condition ●  
 „don't care situation“: blank spaces

Figure 3 Sufficient Conditions

## 5 Discussion

Companies spend an increasing amount of money in social media advertising (SMA), yet social media users avoid a substantial part of it actively (Kelly et al. 2010). The aim of the paper at hand is to provide

a better understanding of the interplay of perceptions influencing social media users' avoidance of SMA. We base on the advertising avoidance model (AAM), providing us with nine perceptions and to answer the research question, we test for different configurations leading to avoidance of SMA. We discovered three configurations of those nine perceptions resulting in the avoidance of SMA, applying fsQCA to respect the equifinality of configurations. In the following, we outline theoretical and practical implications followed by possible areas of future research.

**Theoretical contributions.** We base our research on the AAM (Cho and Cheon 2004), which identifies three main concepts influencing social media users' avoidance of SMA positively: *perceived goal impediment*, *perceived ad clutter* and *prior negative experience*. These main concepts encompass three perceptions each, thus nine perceptions in total, which could have an influence on social media users' SMA avoidance. However, the AAM only explains social media users' SMA avoidance, based on the three main concepts, thus, on an aggregated meta-level and does not supply us with a detailed view on how each of the perception influences social media users' SMA avoidance separately. From these meta-level considerations, we cannot tell, which specific perceptions actually drive SMA avoidance. Maybe some of them are completely irrelevant to SMA avoidance or they even neutralize each other. Therefore, our first contribution is to zoom into the three main concepts, detaching the nine encompassed perceptions and examine their individual importance for social media users' SMA avoidance. From our results, we can deduct that *excessiveness*, *distraction*, *disruption* and *lack of incentive* are necessary conditions and have always to be present when social media users avoid SMA. Further, *distraction*, *disruption* and *search hindrance* function as core conditions, having an especially strong causal link to social media users' SMA avoidance. Therefore, we can conclude that the avoidance of SMA is especially triggered by perceptions assigned to the main concept *perceived goal impediment*. Furthermore, on the aggregated meta-level supplied by the AAM, all main concepts have a positive effect on social media users' SMA avoidance. By zooming into the individual consideration of each perception, we see that some of the encompassed perceptions do not always have a positive influence on SMA avoidance. In certain combinations, some of the perceptions, such as *exclusiveness*, do not have any influence at all and the perception of a *lack of utility* can even have a negative influence on social media users' SMA avoidance.

Consequently, although we now know about the individual importance of each perception from zooming into the main concepts, we still need to explain when, in which configuration, the perceptions lead to SMA avoidance and in which they do not. Without this knowledge, companies do not know under which conditions they should focus on which perceptions to reduce SMA avoidance, which could be a benefit to many companies engaged in SMA. Therefore, we contribute by applying a configurational approach, which identifies three equifinal configurations. Referring to the research question, which asks for different configurations leading to avoidance of SMA, we reveal not only one combination of perceptions leading to avoidance of SMA, but three configurations. In other words, we identify three separate realities, each of them explaining a part of the truth about social media users' SMA avoidance, but only joined they can explain SMA avoidance as a whole. If we have a look at each configuration individually, we can state from configuration 1 that even though SMA is especially perceived as *not lacking of utility* and social media users are *not dissatisfied* with SMA, social media users would still avoid SMA if the advertisements are perceived as *goal impeding*, *irritating* and *lacking of incentive*. Therefore, we can conclude that despite SMA fulfilling the actual aim of being useful and not dissatisfying for social media users, social media users still avoid ads, when they feel irritated, impeded in their actual goal and do not have any incentive not to avoid the ad. Consequently, in this case, already a sub-set of the perceptions recommended by the AAM (Cho and Cheon 2004) is sufficient to bring about the avoidance of SMA. Further, over all configurations *exclusiveness* and the *lack of utility* are less important as they are only present in one of the three configurations. Therefore, we can conclude that *prior negative experiences* concerning the *lack of utility* of ads only influences SMA in combination with the perceptions stated in configuration 3, whereas *dissatisfaction* plays a role in two of three configurations and the *perceived lack of incentive* is even a necessary condition for SMA avoidance. The same applies for *exclusiveness*, which influences SMA avoidance only in combination with the perceptions stated in configuration 3. Thus, it influences SMA avoidance less than *irritation*, appearing in two out of three configurations, and far less than *excessiveness*, which is a necessary condition for SMA avoidance. Therefore, also in

configuration 2 and 3, a sub-set of the recommended perceptions is sufficient to bring about social media users' SMA avoidance.

Taking all of that into account, the AAM supplied us with an understanding of three main concepts, which aggregate nine perceptions, and which explain the influence on social media users' avoidance of SMA on a meta-level. Our research added several contributions to this knowledge: First, we examined the relative importance of each of the perceptions individually, detached from the main concepts, for social media users' avoidance of SMA. We state that some of the perceptions are necessary for the avoidance of SMA while others play a subordinated role, whereas the AAM only considers the main concepts on a meta-level. Second, we reveal three configurations of the identified nine perceptions yielding sufficiently in social media users' avoidance of AAM. Therefore, there is not only one configuration describing the avoidance of SMA, but three, each of them representing a sub-set of perceptions recommended by the AAM yielding SMA avoidance. Third, we detected that the perceptions identified in the AAM do not influence social media users' avoidance of SMA solely positive like indicated in the model, as *lack of utility* influences SMA avoidance negatively in configuration 1.

**Practical contributions.** The distinction between necessary and sufficient conditions helps to take actions against advertising avoidance. As from a company's perspective, it is hard to try to change all of the perceptions, it is important to know which of them are worth focusing on. From our analysis we know that *excessiveness*, *distraction*, *disruption* and *lack of incentive* are necessary conditions, thus always play a role in social media users' avoidance of SMA. Companies might not have an influence on the excessiveness, as the amount of advertisement presented in social media will rather rise (Infolinks 2013). Also the distracting or disruptive allocation and character of advertising in social media is hard to change, as the conditions of frequency and format of the ad exposure reside with the social media site, displaying the ad (eMarketer 2016). However, they can focus on the condition lack of incentive, stating that social media users do not believe to get any benefit or entertainment from SMA. As social media users often use social media sites in their leisure time, companies could use this knowledge to design entertaining, playful or rewarding advertisements. This would decrease social media users' avoidance of SMA by delivering an incentive not to avoid them and thus they could spend their money more efficiently. In a long term, companies should focus on ad designs not impeding social media users from his or her goals but assisting them with their purchase decision or their search for product information. This would not only decrease avoidance in SMA but could also outweigh prior negative experiences and gentrify the image of SMA.

**Limitations and further research.** Our study is not free of limitations. We gained 118 cases of SMA avoidance, which we used for analyzing necessary and sufficient conditions. This number is yet adequate as QCA was initially developed for studies with small numbers of observations (Ragin, 2000). According to recommendations from literature, 55 cases are needed for analyzing eleven conditions (Maggetti and Levi-Faur 2013; Marx 2006). This means that an increase in cases to gain more configurations is not required. However, a sample always represents only a part of the population. Additionally, we based our research on the perceptions identified in the AAM, but we are aware that there might be more perceptions influencing the avoidance of SMA. As we know from previous research (Trier and Richter 2015), that social media users behavior in social media differs in organizational and in public context, further research may study avoidance on a broader level and in different social media settings. Future research should use QCA to reveal a typology of social media users avoiding SMA (Mattke et al. forthcoming). Furthermore, as a benefit of QCA is to draw additionally insights from the analysis why social media users do not avoid SMA, future research should address this analysis as well. Finally, we focused our study on avoidance, thus behavioral avoidance. As avoidance also involves cognitive and affective avoidance, future research could analyze these types of avoidance as well.

## 6 Conclusion

Addressing the issue of advertising avoidance in social media, causing high revenue losses for companies, we conducted surveys and a QCA approach to understand what influences social media users'

avoidance of social media advertising (SMA). We draw on the advertising avoidance model to become aware of and consider perceptions, relevant for social media users' avoidance of SMA and to reveal, which configurations of perceptions result in social media users' avoidance of SMA. We identify three different configurations respecting a multi-causal explanation of SMA avoidance.

## 7 Appendix

<p><b>Excessiveness</b> adapted from Cho and Cheon (2004)</p> <ul style="list-style-type: none"> <li>• When I am using Facebook, I think the amount of advertising on Facebook is excessive. (0.91)</li> <li>• I got the feeling that Facebook overly displays advertising. (0.92)</li> </ul>	<p><b>Exclusiveness</b> adapted from Cho and Cheon (2004)</p> <ul style="list-style-type: none"> <li>• When I am using Facebook, I think Facebook is exclusively an advertising medium (0.91)</li> <li>• I think that advertising is an integral part of Facebook. (0.88)</li> </ul>
<p><b>Lack of incentive</b> adapted from Cho and Cheon (2004)</p> <ul style="list-style-type: none"> <li>• No incentive is offered for the continued clicking of Facebook ads. (0.87)</li> <li>• Continued clicking of Facebook ads provides no benefit. (0.89)</li> <li>• I am not given any incentive for my loyalty and continued use of the service after clicking Facebook ads. (0.87)</li> </ul>	<p><b>Dissatisfaction</b> adopted from Cho and Cheon (2004)</p> <p><i>How do you feel about your overall experience with advertising in Facebook? [7-point Likert scale]</i></p> <p>Extremely dissatisfactory ... Extremely satisfactory (0.93)</p> <p>Extremely unpleasant ... Extremely pleasant. (0.96)</p> <p>Absolutely terrible ... Absolutely delightful. (0.96)</p>
<p><b>Disruption</b> adapted from Cho and Cheon (2004)</p> <ul style="list-style-type: none"> <li>• Facebook ads disrupt my viewing of Facebook newsfeed. (0.93)</li> <li>• Facebook ads disrupt the reception of desired content. (0.94)</li> <li>• Facebook ads intrude on my search for desired information. (0.87)</li> </ul>	<p><b>Irritation</b> adapted from Ducoffe (1996)</p> <p><i>I think advertising in Facebook....</i></p> <p>insults peoples' intelligence (0.75)</p> <p>is annoying (0.91)</p> <p>is irritating (0.92)</p> <p>is deceptive (0.88)</p> <p>is confusing (0.72)</p>
<p><b>Search hindrance</b> adapted from Cho and Cheon (2004)</p> <ul style="list-style-type: none"> <li>• Facebook ads make it harder to browse the Facebook newsfeed. (0.95)</li> <li>• Facebook ads slow down Facebook newsfeed downloading. (0.95)</li> <li>• Facebook ads make Facebook navigation difficult. (0.93).</li> </ul>	<p><b>Lack of utility</b> adapted from Cho and Cheon (2004)</p> <ul style="list-style-type: none"> <li>• Clicking Facebook ads does not help me improve my personal performance. (0.79)</li> <li>• I think that my Facebook ad use does not improve my productivity. (0.94)</li> <li>• In my opinion, clicking Facebook ads increases my effectiveness in managing information. (0.96)</li> </ul>
<p><b>Distraction</b> adapted from Cho and Cheon (2004)</p> <ul style="list-style-type: none"> <li>• Facebook ads distract me from the editorial integrity of Facebook newsfeed. (0.88)</li> <li>• Facebook ads infringe on my control. (0.86)</li> <li>• Facebook ads interrupt the flow of an editorial unit. (0.89)</li> </ul>	<p><b>Behavioral ad avoidance</b> adapted from Cho and Cheon (2004)</p> <ul style="list-style-type: none"> <li>• I scroll down Facebook's newsfeed to avoid ads in Facebook. (0.87)</li> <li>• I do any action to avoid ads in Facebook. (0.88)</li> </ul>
<p><i>Note: All items were measured with a 7-point Likert-type agreement scale ranging from 1 = "completely disagree" to 7 = "completely agree".</i></p>	

Table 3 Constructs

## 8 References

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