

# **CANCELLATION POLICIES IN COMBINATION WITH SCARCITY- AND SOCIAL PROOF APPEALS:**

## **A STUDY INTO THE EFFECTS OF CANCELLATION POLICIES AND PERSUASION CUES ON CONSUMER RESPONSES WITHIN THE ONLINE BOOKING INDUSTRY**

**UNIVERSITY OF TWENTE**

FACULTY OF BEHAVIOURAL, MANAGEMENT & SOCIAL SCIENCES

COMMUNICATION STUDIES

SUBMITTED BY: M. VELTEN

SUPERVISORS: DR. A. BELDAD  
PROF. DR. A.T.H. PRUYN

**UNIVERSITY OF TWENTE.**

# COLOPHON

**MASTER THESIS**

JUNE 2017

**SUBMITTED BY** M. VELTEN

**SUPERVISORS** DR. A. BELDAD  
PROF. DR. A.T.H. PRUYN

**UNIVERSITY OF TWENTE**

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## ABSTRACT

Consumers that are looking for hotels online can either book via the hotels' direct website or via an Online Travel Agent (OTA), also defined as booking intermediary. This research focuses on the hotel advertisements of OTA's, which are shown after website visitors defined their preferences regarding their trip in a search tool (in terms of price, location, facilities etcetera). OTA's provide their consumers then with an overview of hotels that best fit the consumers' preferences. The results of a preliminary study show that OTA's often use persuasion heuristics in these advertisements, such as social proof and scarcity appeals, in order to increase perceived product quality and influence visitors' purchase intentions.

For arousing scarcity perceptions amongst visitors, banners with the text "only \* rooms left for this hotel" are often applied, while social proof appeals are mostly communicated in terms of customer reviews. Furthermore, it appeared that OTA's use "free cancellation" signals to promote their lenient cancellation policies in order to decrease consumers perceived risks while purchasing (Chen, Schwartz, & Vargas, 2011). Whilst these three constructs (social proof, scarcity and cancellation policy signals) are often used simultaneously in advertisements, no research was found that probed a possible interaction between the different constructs. Moreover, the managerial objective of this research is to provide recommendations to OTA's that use these three signals in order to improve their overview advertisements.

Beside the main effects of scarcity, social proof, and cancellation on the dependent variables included in this research (attitude towards the advertisement, attitude towards the product and purchase intention), interaction effects are expected to occur. This expected relation is based on two assumptions: **Assumption 1)** Social proof and scarcity appeals can positively influence consumers' attitudes and can reduce consumers' perceived risk during online reserving (Cialdini & Goldstein, 2004). Reduced risk makes consumers more certain about purchases (or bookings), which may result in a decreased need for lenient cancellation policies. **Assumption 2)** Scarcity appeals increase consumers' urge to buy (Badgaiyan & Verma, 2015), since there is not much time left to decide whether or not to book because "there are only a few rooms left". Additionally, customers' purchase intentions can increase due to social proof appeals (Cialdini, Influence, 1987), based on the statement that 'if other consumers have booked and liked this hotel, it must be good'. If the consumer still experiences insecurity, but feels an urge to buy, a lenient cancellation policy might be the trigger to just secure the hotel deal now, because he or she can always cancel later on without being tied to fees.

In order to check which one of these assumptions is superior to the other, a critical experiment is carried out. Data collection for the main research was performed by the means of an online survey. With a total of 409 responses, several MANCOVA tests were performed in order to identify the relationships among the constructs. The results of this study show that social proof has a significant main effect on consumers' attitudes towards the advertisement and attitude towards the product, as well as on their purchase intention. Furthermore, a two way interaction occurred between social proof and cancellation on the respondents' attitudes towards the advertisement. In contrast with these results, no main effects were found for cancellation as well as for scarcity on the respondents' attitudes and purchase intentions. Scarcity even showed a marginally negative effect on the dependent variables. Additionally, consumers' attitude towards online booking was incorporated as a covariate. The results show that respondents who have a more positive attitude towards online booking, score higher on attitude towards the advertisement and attitude towards the product.

To conclude, several managerial implications are formulated. First, OTA's need to explicitly incorporate social proof appeals in their advertisement designs, since this can result in positive attitudes towards their advertisements, towards their products and increases consumers' purchase intentions. Further, when OTA's strive for the most positive attitude towards the advertisement, they should include social proof appeals in their ads, and are advised not to combine them with free cancellations signals. However, if they want to use ads without social proof appeals, they should provide visitors with free cancellation signals. Moreover, marketers should be cautious with scarcity appeals, since it can have a negative influence on consumers' attitudes and behavioural intentions. Finally, since banners with "free cancellation" do not significantly influence consumers attitudes and behavioural intentions, it is advised to OTA's to not use free cancellation signals too often. In this way, they can ask for cancellation fees later on in the more elaborated advertisements (after the consumer clicked on the overview ad).

**Keywords:** persuasion heuristics, social proof, scarcity, cancellation policy, online hotel booking.

# 1 INTRODUCTION

## 1.1 ONLINE BOOKING BACKGROUND

The Internet serves as an excellent distribution channel for hotel bookings, which long has coexisted with traditional tourism channels such as travel agencies (Law & Wong, 2010). In fact, the last decade the internet even prevails over these long-established agencies. ITB International (2015) states that of the total bookings made in 2015, almost 65% were made online, and this percentage is expected to grow in the coming years. The driving force behind this increase in online reservations is consumers' insistence upon convenient and hassle-free service and accurate information (Connolly & Olsen, 2000; Ho, Wong, Sarwar, & Lau, 2000). Online booking websites satisfy consumers' demands by allowing potential customers to easily gather information about hotels and their facilities by search tools, providing them with real-time ratings and structured information about the terms and conditions, and make comparing prices easy (Connolly, Olsen, & Moore, 1998).

Consumers who are interested in booking a hotel room online have two options; they can either reserve the hotel room directly via the hotels' official website (e.g. [www.hilton.com](http://www.hilton.com)), or via indirect booking channels, also classified as Online Travel Agents (OTA's), which are hosted by third party agencies (Li-Ming & Wai, 2013). These OTA's are considered as intermediaries that assist the hotels in selling their rooms. OTA's provide consumers with clear, structured product information whereby they easily can compare different hotels, prices and booking-conditions before making a reservation (Law & Wong, 2010). Examples of these third-party booking websites are Booking.com, Hotels.com and Trivago.com, which are market leaders in the European tourism market.

The screenshot shows a Booking.com listing for 'Andaz London Liverpool Street'. It includes a photo of the hotel lobby, a star rating of 9.0, and various promotional messages. The text 'Wonderful 9.0' is prominently displayed, along with 'Location 9.3' and '1,091 reviews'. A message states '3 people are looking right now' and 'Booked 39 times today'. A call to action says 'See all 2 available rooms >'. A specific room offer is highlighted: 'Double Room' for '€ 344' with 'FREE cancellation - no prepayment needed'. A warning message says 'In high demand - only 2 rooms left on our site!'. A note mentions 'You can cancel later, so lock in this great price today.'

Figure 1.1. – Booking.com advertisement example

Whenever consumers are searching for a hotel on an OTA, they can identify their preferences in a search tool in terms of, for example, price, destination, and holiday timeframe. Based on this input, the website provides an overview of hotels which best matches consumers' needs.

These hotels are presented to the consumers including information like the hotel name, exact destination, price and an appealing picture of the accommodation. By taking a closer look at these advertisement overviews during a preliminary study, it appeared that besides the standard information, booking websites often show persuasion heuristics, such as social proof or scarcity appeals, to stimulate booking intentions amongst their online visitors. Furthermore, the preliminary study showed that these appeals are, in most cases, shown simultaneously with banners which give an indication of the practiced cancellation policy of the website (figure 1.1). Previous research indicated that different cancellation policies, in terms of leniency, induce different effects on consumers' attitudes towards the hotel and their booking intentions (Guo, 2009). The same applies for the persuasion tactics scarcity and social proof (Aggerwal, Jun, & Huh, 2011). In the following paragraphs, the constructs incorporated in this research (cancellation policies, social proof- and scarcity appeals) and their possible relationship, will be discussed.

## **1.2 CANCELLATION POLICIES FOR OTA'S**

Literature identifies several reasons why hotels practice different types of cancellation policies. One reason to use a lenient cancellation policy is to stimulate consumers' purchase intentions (Chen, Schwartz, & Vargas, 2011). Consumers experience high levels of risk during online reserving, since they have no experiential information about the hotel before visiting (Wood, 2001). Therefore, to increase consumers' booking intentions and decrease their perceived risks, companies can use lenient cancellation policies, whereby customers can get their credit back in case they want to cancel or change their reservation later on (Schwartz, 2008). Literature found that cancellation policies with deadlines have the same benefits for organizations as refund policies for returned goods (Chen, Schwartz, & Vargas, 2011). Xie and Gerstner (2007) state that (lenient) refund policies induce positive attitudes towards the product and signal product quality to consumers, which in their turn can increase profit margins.

Despite these established benefits of refunds, the hospitality industry has moved towards stricter cancellation policies for over the last decade in terms of reduced refunds (Chen, Schwartz, & Vargas, 2011). These increasingly imposed fees and deadlines are used in order to stimulate revenues by capturing a part of the credit whenever there are costs due to cancellation and no-shows (Guo, 2009). The loss for organizations is particularly high with last-minute cancellations, when not enough time is left to re-sell the unsold inventory to other consumers (Xie & Gerstner, 2007; Koide & Ishii, 2005). In sum, whilst lenient cancellation policies are used to take away consumers' uncertainty and increase booking intentions, stricter cancellation policies can be used to increase the revenues in case of no-shows or cancellations.



### 1.3 PERSUASION HEURISTICS

Scarcity appeals are commonly used advertising tactics by popular hotel booking sites, intended to motivate consumers' booking behaviour by arousing product scarcity perceptions (Inman, Anil, & Raghubir, 1997). Messages like "only three rooms left" in advertisements signal to consumers that a products' popularity is producing demand that might exceed the availability (Van Herpen, Pieters, & Zeelenberg, 2009). Previous research found that these messages can stimulate consumers to reserve (Lee, Jeon, Li, & Park, 2015), since scarcity appeals trigger consumer inferences about product desirability and attractiveness (Lynn, 1992), perceived product quality (Aguirre-Rodriguez, 2013), and consumers' desire for uniqueness (Verhallen, 1982).

Another persuasion tactic commonly used by OTA's to increase product attractiveness is social proof (Cialdini & Goldstein, 2004). Messages indicating social proof for hotels are for example "people reviewed this hotel with an 8.2" or "popular amongst Dutch customers". These heuristics are based on the rule that if others are doing it, it must be good (Cialdini & Goldstein, 2004). A core premise of social proof is that imitation is a characteristic response to uncertainty in decision making (Cyert & March, 1963). Therefore, social proof is the most effective when people are in uncertain circumstances and wish to acquire more information about the correct behaviour, since acting as other people makes the chance of making a mistake smaller (Cialdini, 2001). Since purchasing travel products is for many consumers a high involvement process (Jun, Vogt, & Mackay, 2007), social proof messages are expected to be particularly effective in online booking environments.

### 1.4 RELATION BETWEEN CANCELLATION POLICIES AND PERSUASION HEURISTICS

There is extensive literature on both persuasion heuristics (scarcity and social proof) as well as on the effects of different cancellation policies in terms of leniency. Whilst these three different advertising tactics are often used simultaneously in advertisements, no research was found that probed the interaction between these constructs. This research builds on two assumptions that might explain a relationship between cancellation, scarcity and social proof.

**Assumption 1)** As mentioned in the previous paragraphs, social proof and scarcity appeals can positively influence consumers' attitudes and can reduce consumers' perceived risk during online reserving. Reduced risk makes consumers more certain about their purchase (or in this case booking), which may result in a decreased need for lenient cancellation policies. This research aims to focus on this possible relationship, which might be interesting for hotels that have to deal with high levels of cancellation and want to practice stricter cancellation policies (in terms of for example fee's) in order to increase revenues.

**Assumption 2)** On the other hand, this study explores the assumption that scarcity appeals increase consumers' urge to buy, since there is not much time left to decide whether or not to book ('there are only a few rooms left') (Badgaiyan & Verma, 2015). In addition to that, when a social proof appeal is shown, customers get more inclined to buy the product, based on the statement that 'other consumers have booked and liked this hotel, so this hotel must be good'. If the consumer is still insecure, but experiences an urge to buy in combination with a positive attitude towards the product due to social proof, a lenient cancellation policy (free cancellation) might be the trigger to just secure the hotel deal now, because the consumer can always cancel the booking if he or she changes their mind later on. In order to check which one of these assumptions is superior to the other, a critical experiment is done.

As already mentioned, social proof, scarcity and cancellation are expected to have an influence on consumers' attitudes. According to Biehal, Stephens, and Curlo (1992), attitude towards the advertisement is an important antecedent of brand attitudes and purchase intentions. Mehta (2000) states that consumers' attitude towards advertising is one of the most influential indicators of advertising effectiveness. This is due to the fact that consumers' cognitive abilities towards the advertising are reflected in their thoughts and feelings, which subsequently will influence their attitude towards the advertisement (MacKenzie & Lutz, 1989). In order to gain more insight into the effectiveness of advertisements that include persuasion heuristics and cancellation signals, the variable of attitude towards the advertisement is incorporated as the first dependent variable. Additionally, attitude towards the product, or in this case hotel, is included as an outcome variable. As stated before, social proof, scarcity and cancellation policies can positively increase consumers' attitudes towards the product, which are according to Darley and Lim (1991), partly influenced by attitude towards the advertisement. Last, the success of online booking platforms is based on the number of visitors and booking-rates (Goldschmidt, Junghagen, & Harris, 2003). Therefore, one of the focus points of this research will be the influence of the antecedents (social proof, scarcity and cancellation) on consumers' purchase intention.

This research will not only make a theoretical contribution by exploring a possible relation between the different constructs, but also provides valuable insights for companies which employ these social and scarcity persuasion tactics in combination with cancellation policies in their advertisements.

## 1.5 RESEARCH QUESTIONS

In order to achieve the aforementioned objectives, the following research questions are formulated:

RQ1 To what extent do scarcity, social proof, and cancellation have an effect on consumers' (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intentions?

RQ2 To what extent do scarcity- and social proof appeals moderate the relationship between cancellation policies and consumers' (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intentions?

The remainder of this article is organized as follows; first, drawing on existing literature, a number of antecedents for marketers to practice cancellation policies are presented and the benefits of persuasion heuristics are given. At the end of Section 1, a number of hypothesized relationships are suggested and summarized in a conceptual model. Section 3 presents the method for testing the model and hypotheses. In Section 4, the research findings are presented. And finally, managerial implications and directions for future research are discussed in Section 5.

## 2 THEORETICAL FRAMEWORK

This section examines the constructs incorporated in this research in more detail. First, the importance of the independent variables cancellation (2.1), social proof (2.2.1) and scarcity (2.2.2) will be elaborated and relevant hypotheses will be introduced. In paragraph 2.3, it is discussed whether social proof and scarcity appeals moderate the relationship between the antecedent and outcome variables (attitude towards the advertisement, attitude towards the product and booking intention. In paragraph 2.4, the importance of the incorporated covariate will be described. In the last paragraph (2.5) the conceptual model provides an illustration of the aforementioned relationships.

### 2.1 CANCELLATION POLICIES IN ONLINE BOOKING

Service providers in the hospitality industry commonly practice advance selling (bookings) by charging buyers a prepayment in exchange for a certified entitlement (e.g., a ticket) to consume the service in the future (Guo, 2009). In other words, a booking is the time that separates a consumers' purchase moment from the time that the services or products are consumed (Chen and Xie (2013). This kind of pre-selling in travel-related businesses increasingly involves a buy-back clause under which consumers can cancel the advance purchase before an established deadline by, in some cases, paying a fee (Xie & Gerstner, 2007). Thus, when these clauses are included in the pre-selling conditions, consumers can choose to exchange their consumption entitlement for a (partial) refund before the service is actually consumed (Guo, 2009).

Most hotel reservations come with cancellation policies. However, not every cancellation policy is the same. There are for example various forms of penalties that customers are bound to in case they cancel the agreements (Quan, 2002). Literature identified three main types of cancellation policies: (1) cancellations that have a fixed deadline, but where consumers can get their full payment back (Chen et al., 2010); (2) cancellations where consumers cannot get their full payment back, regardless of the time of the cancellation (Wood, 2001), and (3) a combination of both aforementioned restrictions (McCartney, 2011). One of these cancellation options or a combination are common practice for most hotels and OTA's, however, not every website has the same leniency in terms of deadlines and fee's (Liu & Zhang, 2014). Research indicated that most websites use a partial refund, which allows consumers to denounce pre-sold services with a cancellation fee, while refunding the remaining advance payment (Guo, 2009). As a general rule though, the closer the cancellation is to the day of consumption, the harder it is for the customers to receive full refund for their reserved travel service (Quan, 2002).

The diverse cancellation options induce different outcomes. For example, Wood (2011) has indicated that consumers appear to order products with more careful consideration and delay purchase decisions when a strict refund policy is imposed. This is because a non-lenient cancellation policy reduces the flexibility of the consumer, which results in consumers who are more intended to search further than to book immediately (Quan, 2002). In case of stricter cancellation policies, consumers are more motivated to compare and contrast the terms of cancellation on different websites and then choose their preferred options (Law & Wong, 2010).

Furthermore, Wood (2001) states that the physical remoteness during an online reservation makes consumers sacrifice the benefit of psychological inspection of the product (or service) attributes. Consumers even can make the wrong purchase, or in this case booking decision, due to the lack of experiential information. Hence, the intangible nature of tourism products is often associated with high levels of insecurity and perceived risk (Horner & Swarbrooke, 2016; Wood, 2001). To decrease consumers' insecurity and perceived risks, which are two of the main reasons of delaying bookings, companies often use cancellation options in order to lower the threshold to buy (Pei, Paswan, & Yan, 2014). Therefore, cancellation policies are not only designed to decrease consumers' uncertainty, but also to affect travellers' booking behaviours in a way that is more profitable for hotels (DeKay, Yates, & Toh, 2004).

Another reason to practice lenient cancellation policies is to influence booking behaviours of deal-seeking travellers. Chen, Schwartz and Vargas (2011) state that in online booking environments, where savvy consumers are using the Internet to search for better deals, cancellation policies might play an important role by impacting the search and booking behaviour of these consumers. There are many indications that deal-seeking consumers continue their search after a reservation, to look for an even better deal for the same travel product (Chen et al., 2011). If these deal-seekers find a better deal after their initial booking, they cancel their existing reservation and book the better deal (Chen et al., 2011). With cancellation policies, organizations can trigger deal-seeking consumers to book, since they have the opportunity to change or cancel their reservation without being tied to (high) costs.

Furthermore, according to Chen et al. (2011), cancellation policies have the same benefits for organizations as refund policies for returned goods. They namely have been shown to, besides decreasing the perception of risk (Mann & Wissink, 1988) and increasing consumers' behavioural intentions, influence the perceived reliability of the organizations (Bonfield, Cole, & Schultz, 2010). This is based on the justice principle, which states that a lenient cancellation policy will enhance consumers' perception of fairness, which in turn will positively influence their attitude towards the organization (Pei, Paswan, & Yan, 2014).

Furthermore, this research included attitude towards the advertisement (Aad) as an dependent variable. Aad refers to 'a predisposition to respond in a favourable or unfavourable manner to a particular advertising stimulus during a particular exposure occasion' (Lutz, 1985, p. 46). Consumers' attitudes towards advertisements are perceived to be situationally-bound, and impacting on other consumers responses immediately following the ad exposure (Lutz, 1985) stresses that his view of Aad focuses on a particular exposure to a particular ad, and therefore not on consumers' responses to advertising in general (Lutz, 1985). Mackenzie and Lutz (1989) state that attitudes towards the advertiser (in this case the OTA) is one of the antecedents of consumers' attitudes towards the ad. This affective construct is namely expected to have a "spill over" effect on consumers and cognitive reactions to ads that come from the advertiser (MacKenzie & Lutz, 1989). To come back to the justice principle; free cancellation can induce positive attitudes towards the advertiser, which in their turn positively influences consumers' Aad. According to Lutz (1985), this spill over process is likely to be more or less automatic.

Furthermore, lenient policies can influence consumers' attitude towards the product and increase product quality perceptions (Bonfield, Cole, & Schultz, 2010). Bonfield et al. (2010) explain this effect as follows; organizations may understand that lenient return policies signal to consumers that the firm stands behind the quality of their products or services; on the other hand, organizations realize that lenient return policies are expensive and difficult to manage. Organizations that sell low-quality products or services, are not likely to use lenient cancellation policies, since they are in most cases aware of their low-quality, and know that orders will be returned or cancelled. This will result in higher handling costs of the returned or cancelled goods or services, than any increased revenues from consumers attracted by lenient policies.

In sum, there are several benefits for companies to provide lenient cancellation policies to their customers. The goal of this study is to examine the effects of cancellation policies signals in advertisement overviews of OTA's. Based on the preliminary study of this research, it appeared that OTA's only practice two cancellation signals in their overview advertisements; 'free cancellation' statements or no indication about the cancellation at all. Therefore, this research will test the effects of lenient cancellations compared to the absence of cancellation signals.

H1      A lenient cancellation policy has a greater positive influence on (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intention as compared to the absence of cancellation policy.

## **2.2 PERSUASION HEURISTICS**

Every day, people are confronted with loads of information and countless decisions they have to make. Not surprisingly, people are not likely to deeply process each signal of information, but rather rely on quick mental shortcuts, or general heuristics, to determine their attitudes and behaviours (Cialdini, 2001). As a result of that, marketers increasingly make use of shorter, simple persuasive appeals to stimulate purchase intention instead of using long arguments in their advertisements (Cialdini & Goldstein, 2004). These persuasive tactics are especially effective when people are not capable or willing to deeply consider information from an advertisement (Petty & Wegener, 1998). Research by Cialdini and Goldstein identified six universal principles of persuasion (Cialdini & Goldstein, 2004), namely reciprocity, social proof, consistency, liking, authority, and scarcity. More recent studies by Cialdini acknowledge that there is a seventh principle of persuasion, namely unity. This principle is related to the shared identity between the persuader and the person being persuaded (Cialdini, 2016). The following paragraph will shortly address the other six principles.

A good example of reciprocity are free samples. After receiving a sample, individuals feel more obliged to give something back, for instance to buy the product. The principle of reciprocity recognizes that individuals feel indebted to those who did something for them (or gave them a gift). The consistency principle is based on the fact that people in general want to behave in a consistent way. Getting customers for example to verbally commit to something makes them more likely to follow through with an action or a purchase. The fourth principle identified by Cialdini is 'liking'. The likings principle states that people are more inclined to say yes to a person they like. Last, people respect authority and are inclined to follow the lead of experts. That is why for example, impressive clothing, educational and business titles, and even driving an expensive car, are proven factors in lending credibility to an individual. The science of these six principles can be taught, learned, and applied to increase the persuasive impact of people or organizations (Cialdini, 2001).

This study focuses on social proof and scarcity heuristics, as these are the most used principles by OTA's, based on the outcomes of the preliminary study.

### **2.2.1 SOCIAL PROOF APPEALS**

As mentioned above, Cialdini (1987) has identified several persuasion tactics that can influence people's buying behaviour. One of those tactics that is often used to stimulate online reservations is social proof. Persuasive appeals that indicate messages like "in high demand" or "selling like hotcakes", signal to consumers that a product's popularity is producing demand that might exceed the product's availability (Van Herpen, Pieters, & Zeelenberg, 2009). One of the most used social proof appeals are reviews, with for example "74 people reviewed this

hotel with a 8.6". This appeal indicates that booking this particular hotel is a 'save' choice, since many others have booked it and expressed their positive opinions. These aforementioned cues are based on the consideration that a product that is popular amongst others, must be good, which may induce people to follow the lead of others (Griskevicius, Goldstein, Mortensen, 2009). Each week, for example, there are advertisements in cinema's indicating which is the most popular movie at the time, to help people chose one for their night out. This is because individuals are more likely to engage in a behaviour if they know many others are already doing it (Cialdini & Goldstein, 2004).

Cyert and March (1963) state that imitation is a characteristic response to uncertainty in decision making. Therefore, social proof is most influential when decision makers are uncertain about the value of a commodity, like for example in online shopping or booking environments, when there is no sensory information about the product or service (Roa, Greve, & Davis, 2001). If individuals in these circumstances are able to observe the action of similar others (Roa, Greve, & Davis, 2001), especially peers that are perceived as legitimate, it avoids costs of experimentations for the decision making party (DiMaggio and Powell, 1983).

Indications about the popularity of a product or service are, therefore, proven to be effective in such online environments (Cialdini, 2009). Additionally, individuals' desire for social approval and the competitiveness of consumers, drive them towards these popular products (Worchel, Lee, & Adewole, 1975; Cialdini, 2009). For instance, sales pitches for houses that inform potential customers of other interested buyers attempt to stimulate buying behavior (Cialdini, 1987). Furthermore, previous studies have found that social proof communications have been shown to influence perceptions, awareness, expectations, attitudes and behavioral intentions (Ha, 2004).

Social proof is expected to have an influence on the attitude towards the ad through advertisement credibility. According to MacKenzie and Lutz (1989), advertisement credibility is one of the antecedents for attitude towards the advertisement. This antecedent is likely to be influenced by the source of the marketer. Social proof appeals, that often include reviews of other consumers, are perceived as superior to marketing communication information, since consumers perceive review information as more up-to-date and credible as compared to information coming from marketers (Gretzel & Yoo, 2008). Therefore, it is expected, that social proof appeals from other consumers positively influence the credibility of the advertisement and therefore induce positive attitudes towards the advertisement.

In line with the aforementioned literature, the following hypothesis is formulated:



- H2 Social proof appeals are perceived to have a greater positive influence on (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intention as compared to the absence of social proof appeals.

### 2.2.2 SCARCITY APPEALS

Adding an signal like “only 2 rooms left” can influence buying behaviour, because whenever free choice is limited or threatened, the need to retain freedom of choice makes consumers trying to possess the restricted products significantly more than before (Cialdini, 2001). Aggerwal, Jun, and Huh (2011) state that this threat to lose, or missing out on a buying opportunity, positively influences the perceived value and desirability of the products mentioned in the advertisement. This effect can be explained by the Commodity Theory of Brock (1968). A commodity represents anything capable of being possessed, has use, is transferable from one person to another, and includes both tangible and intangible goods/services (Brock, 1968). The theory suggests that any commodity will be valued to the extent that it is unavailable. Hence, the more available a product is, the lower the perceived value. The value in this case refers to the perceived desirability (Brock & Brannon, 1992).

Availability in this study refers to the capacity of service firms (hotels), and is defined as “the highest quantity of output possible in a given time period regarding the level of staffing, facilities, and equipment” (Lovelock, 1992, p.26). Based on the Commodity Theory, researchers found that knowledge of a product’s scarcity affects consumers’ evaluations of the attractiveness, price and quality of a product (Heo, Lee, Mattila, & Hu, 2013). Other research added the positive influence of scarcity on consumers’ preferences through perceptions of the symbolic benefits the product can deliver, such as social status (Lynn, 1992), uniqueness or distinctiveness (Snyder, 1992), which may induce impulse buying (Lee, Jeon, Li, & Park, 2015).

In line with the literature above, the following hypothesis is formulated:

- H3 Scarcity appeals are perceived to have a greater positive influence on (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intention as compared to the absence of scarcity appeals.

## 2.3 RELATION BETWEEN CANCELLATION POLICIES AND PERSUASION HEURISTICS

After research into the advertisements of the most popular OTA’s, it appeared that persuasion cues like scarcity and social proof are often showed simultaneously with the promotion of lenient cancellation policies. Although there is no empirical literature exploring the moderating effect of social proof and scarcity messages on the relationship between cancellation policies and attitudes and behavioural outcomes, it is reasonable to expect that positive attitudes towards a product (by the use of scarcity and social proof appeals) will increase consumers’

confidence in the product quality (in this case hotel) and thus, reduce consumers' perceived risk of the booking. Therefore, consumers are expected to have a reduced need for (lenient) cancellation policies. This might be interesting for organizations that still want to capture a part of the revenue in case of cancellations or no shows, by utilizing strict(er) cancellation policies.

Another reasoning for an interaction effect between social proof, scarcity, and cancellation is the following; as mentioned in the previous paragraphs, it is established that social proof and scarcity appeals increase positive attitudes towards the advertised product and can reduce the consumers' uncertainty, due to trusting on the behaviour of others. David Hoffeld (2016) states that when practicing a persuasion heuristic like social proof or scarcity successfully, companies can convey their potential customers that buying their product or service is the safe thing to do. In addition to this, scarcity appeals increase consumers' urge to buy, due to banners like "there are only two rooms left". When the consumer feels pressure to buy, but is still not completely sure, a lenient cancellation policy might be the trigger to just secure the booking deal now, since they can always cancel their booking later on if they change their mind.

In order to check which one of these assumptions is superior to the other, a critical experiment will test the research question below

RQ    To what extent do scarcity- and social proof appeals moderate the relationship between cancellation policies and consumers' (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intentions?

## **2.4    COVARIATES**

In this study, attitude towards online shopping (in this case booking) is included as a predictor towards the outcomes. According to Haque and Khatibi (2006), consumers' attitude towards online shopping is the most important influencer of online shopping behaviour. They state that attitudes have a direct influence on the decision making process and is a crucial factor in consumers' purchase behaviour. Attitudes towards online shopping are defined as individuals' positive or negative feelings related to accomplishing purchases online (Chiu, Lin, & Tang, 2005; Schlosser, 2003). These attitudes can vary due to for example personalities, lifestyles and social classes (Li-Ming & Wai, 2013), but can also depend on the preference of people for offline booking agencies. Social interaction with travel agents is mentioned as one of the main reasons for offline booking, next to the travel agents' expertise and the possibility to save time on searching for the right accommodation (Bogdanovych, Berger, Simoff, & Sierra, 2006). Furthermore, Bogdanovuch et. al (2006) state that many people are still reluctant to utilize the internet as a channel for holiday booking due to security and trust concerns.

In sum, when consumers do have a positive attitude towards online booking, it is expected to increase their attitudes towards the advertisement and product, as well as their purchase intentions.

Based on the previous mentioned statements, it is hypothesized that

- H4 A positive attitude towards online booking will have a greater positive effect on consumers' (a) attitude towards the product, (b) attitude towards the advertisement and (c) purchase intention as compared to a negative attitude towards online booking.

## 2.5 CONCEPTUAL MODEL

Based upon the literature review and the constructed hypotheses, a conceptual design is created and shown below in figure 2.5.1.

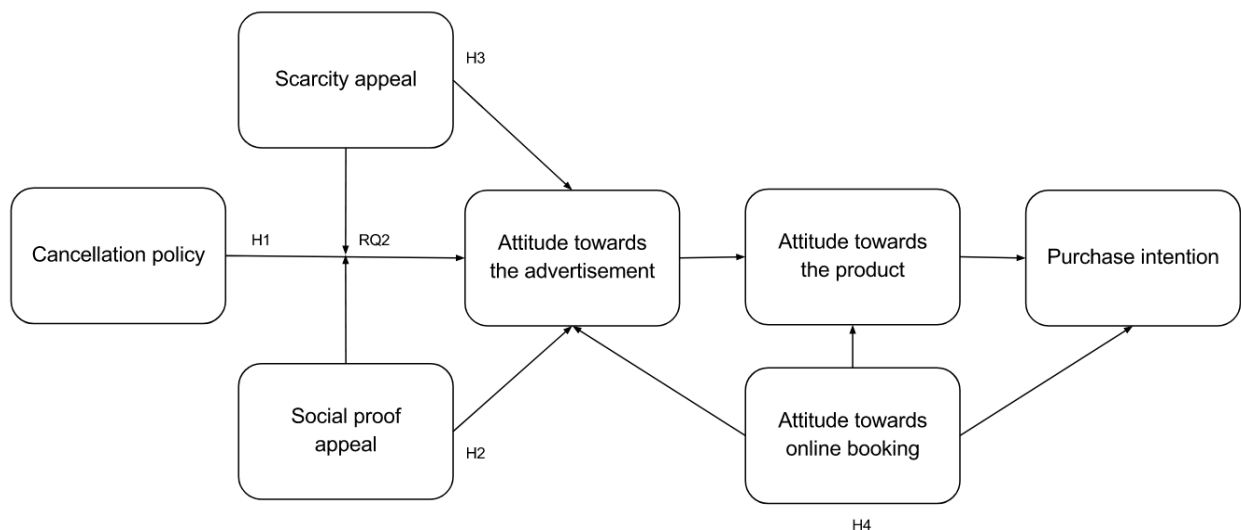


Figure 2.5.1. – Research model

The independent variable cancellation policy is expected to affect attitude towards the advertisement, attitude towards the product and booking intentions. In addition to that, this proposed relationship will be tested on the moderating effect of the variables social proof- and scarcity appeals. Furthermore, scarcity- and social proof appeals are expected to have a direct influence on the outcome variables. The next chapter will further elaborate on the research method used for this study.

### 3 METHOD

For this research, a preliminary study and a main study have been performed. In the first section of this chapter, the results of the preliminary study will be reviewed. The second section starts by discussing the research design of the main study, the participants and the used procedure. Furthermore, the stimulus materials of the different research conditions will be described, the scales that were used will be elaborated, and the reliability scores of the constructs will be examined.

#### 3.1 PRELIMINARY STUDY

Before establishing the research model, a small-scale preliminary study was conducted in order to identify the most commonly used persuasion heuristics and cancellation policies by booking intermediaries. The websites that were analyzed for the preliminary study were based on a list provided by eBiz MBA (2017). This organization made a list of the most popular OTA's based on a ranking by websites such as Alexa Global Traffic Rank and U.S. Traffic Rank. Since not every OTA in this list could be used for this study due to the lack of actual booking-options (some websites only compared prices and did not provide booking options), some websites were replaced by other popular booking websites based on TopTenReviews.com.

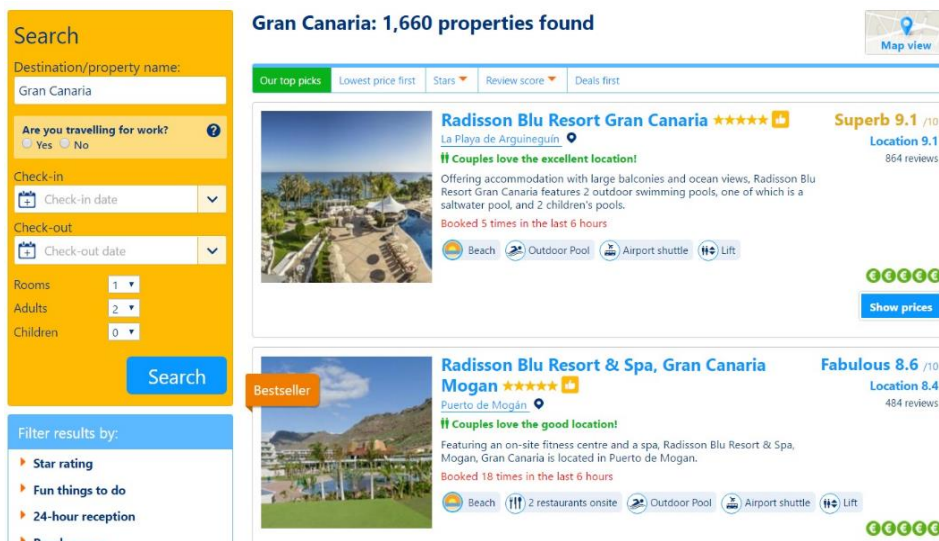


Figure 3.1.1 – Example of OTA overview advertisements

As mentioned in the introduction, this research only focuses on the advertisements that are shown in the hotel overviews provided by booking websites (example figure 3.1.1). The hotel advertisements shown in these kind of overviews are based upon the preferences that visitors have identified in a search tool (in terms of for example destination and vacation time frame). Websites here compose a list of hotels that best fit the consumers' needs. Since visitors here indicate their initial interest in a hotel by clicking on one of the proposed websites (based upon the information shown in the advertisement), the choice was made to only observe these

advertisements, instead of the more elaborated advertisement of the hotel that is shown after the visitor clicks.

For each website on the list of eBiz MBA (2017), 12 advertisements were observed. The advertisements were randomly selected with an interval of 4 advertisements. To avoid biases, the search in terms of destination and time were the same for every observed website. In table 3.1.1, an overview of the different kinds of persuasion heuristics and cancellation policies is given. In addition to that, the table shows how often these heuristics and policies were used on the observed booking websites.

The table distinguishes three different groups, namely cancellation policies, social proof appeals, scarcity appeals and additional heuristics. The last category “additional heuristics” was created for the heuristics that were used on website besides social proof or scarcity appeals, for example a banner with the text “special offer”.

Regarding the cancellation policies, the results indicate that “free cancellation” is the only phrase that is used as an cancellation signal in the advertisements. For the remaining advertisements, booking websites did not show cancellation conditions. After clicking on the overview advertisements, the booking websites provided more detailed information about the cancellation policy of the particular hotel. It appeared that for most websites (7 of 10), a free cancellation (until 24 hours before the booking date) or non-refundable policy was applied.

From table 3.1.1, it can be concluded that the most commonly used persuasion tactics are social proof and scarcity appeals, however, not every site uses the same phrase or form for these appeals. Although there are several differences in the used form of social proof (e.g. “Loved by quests” or “ \* people recommend this hotel”), an appeal that indicated the number of reviews and rates was applied by all analyzed booking websites. Based on this, a number of reviews and rates are used as a social proof appeal in this research. In addition to that, the results of the scarcity appeals show that 7 out of 10 websites used a phrase similar to “only \* rooms left”. Therefore, small banners with this phrase will be used as a scarcity heuristic for the main study.

**Table 3.1.1** – Overview persuasion heuristics and cancellation policies

<i>Websites</i>	<i>Cancellation policy</i>	<i>Social proof</i>	<i>Scarcity</i>	<i>Additional heuristics</i>
<b>Booking.com</b>	“You can cancel later, so lock in this great price today” (7) + “FREE cancellation” (7)	Amount of reviews and rates (12) + “In high demand” (6) + “Booked * times in the last * hours” + “	“Only 3 rooms left on our site” (7). + “You missed it, we reserved our last available room at this property” (2) +	“**% off today” (4)

	(these are used simultaneously)	* people are looking right now	"You missed this one, but there are other great options if you're quick" (1)	
<b>Hotels.com</b>	"Free cancellation" (7)	Amount of reviews and rates (12) + "Loved by guests" (4) + booked * hours ago (10)	"Only * left at our site" (4)	"Top hotel" (2) + "Pay now or later" (5) + "Special offer" (6)
<b>Expedia</b>	"Free cancellation" (5)	Amount of reviews and rates (12) + "Most popular" (4) + "* people booked this property in the last * hours" (11) + "booked in the last * minutes" (12) + "in high demand" (6)	"Be quick! * left for €*" (1) + "We have * left at €*" (7) + "Hurry! Offer ends in * minutes" (2)	"Reserve now, pay later" (7) + "Earn * points" + "Sale" (5)
<b>Agoda.com</b>	"Free cancellation" (6)	Amount of reviews and rates (12) + "* travelers are considering this property right now" (3) + "* * travelers are looking to book available rooms here now" (4)	"our last * rooms at €*" (5)	"Pay later" (4)
<b>Priceline.com</b>	"Free cancellation" (10)	Amount of reviews and rates (12) + "* people viewing" (8)	"* rooms left" (8)	"Pay later" (4) + "Sale" (3)
<b>Travelocity.com</b>	"Free cancellation" (7)	"* people booked this property in the last * hours" (10) + "booked in the last * minutes" (12) + "in high demand" (4)	- "We have 2 left at €*" (6) + "today *% off" (4)	"Reserve now, pay later" (6) + "sale" (4)
<b>Kayak.com</b>	"Free cancellation" (4)	Amount of reviews and rates (12)		
<b>Orbitz.com</b>	No information about cancellation	Amount of reviews and rates (12) + "In high demand" (4) + "* people booked this property in the last * hours" (10) + "booked in the last * minutes" (11)	"We have 2 left at €*" (6) + "Hurry! Offer ends in * minutes"	"daily deal (inc time) (2) + "*% off today" (4) + "reserve now, pay later" (4) + "earn *" (12)
<b>Hotwire.com</b>	No information about cancellation	"**% recommend amazing/favorite/.." (12)		"**% off" (3)
<b>Travelzoo.com</b>	No information about cancellation	Amount of reviews and rates (12)	"Sells out quickly" (3)	"Great price" (3)

### 3.2 RESEARCH DESIGN MAIN RESEARCH

The findings from the literature review led to the development of an 2 x 2 x 2 between subject factorial design, aiming to study the effectiveness of the different persuasion techniques (scarcity and social proof) in the tourism industry in combination with different cancellation policies. The conditions are shown in table 3.2.1.

**Table 3.2.1** – Overview of research conditions

	Scarcity appeal ( <b>SC</b> )		No scarcity appeal ( <b>NSC</b> )	
	Social proof ( <b>SP</b> )	No social proof ( <b>NSP</b> )	Social proof ( <b>SP</b> )	No social proof ( <b>NSP</b> )
Lenient cancellation policy ( <b>LCP</b> )	(1) LCP, SC, SP	(3) LCP, SC, NSP	(5) LCP, NSC, SP	(7) LCP, NSC, NSP
No information about cancellation policy ( <b>NCP</b> )	(2) NCP, SC, SP	(4) NCP, SC, NSP	(6) NCP, NSC, SP	(8) NCP, NSC, NSP

The conditions for the cancellation policies were created based upon the preliminary study. The treatments included two levels of cancellation, namely “lenient”, where the advertisement shows a “free cancellation” banner, and a “no information about cancellation policy”, whereby no indication of the cancellation policy was given in the overview advertisement. These treatments are shown in table 3.2.1. Social proof was manipulated with a small banner in the advertisement with the number of reviews and the average rate. The other treatment group had no social proof message. The no-social proof condition mentioned that the hotel had just opened and no reviews were given yet, in order to imitate a real-life booking the best as possible. It would not have been realistic to not mention any information about rates or reviews, since every hotel that was observed in the preliminary study indicated a rate and the number of reviews. The manipulation of the scarcity appeal was done by a small banner with the following text: “only 2 rooms left at €\*”. The remaining conditions that did not include a scarcity message had blanks in the same place as were the scarcity condition placed the banner.

Below there is an overview given of all the different conditions:

1. Lenient cancellation policy (“Free cancellation”) with a scarcity appeal (“Only 2 rooms left at €”) in combination with a social proof appeal (Very good! 17 reviews).
2. No cancellation policy with a scarcity appeal (“Only 2 rooms left at €”) in combination with a social proof appeal (“Very good! 17 reviews”).
3. Lenient cancellation policy (“Free cancellation”) with a scarcity appeal (“Only 2 rooms left at €”).

4. No information about cancellation policy with a scarcity appeal ("Only 2 rooms left at €").
5. Lenient cancellation policy ("Free cancellation") with a social proof appeal (Very good! 17 reviews").
6. No information about cancellation policy with a social proof appeal ("Very good! 17 reviews").
7. Lenient cancellation policy ("Free cancellation) without appeal.
8. No information about cancellation policy without appeals.

### 3.3 PROCEDURE

In order to test the hypotheses, a quantitative study was held amongst Dutch participants. Because the experiment is a 2 (scarcity/no scarcity appeal) x 2 (social proof/no social proof appeal) x 2 (lenient cancellation policy/no cancellation policy) design, a number of 240 respondents was needed in order to secure reliability. Data collection was performed by means of an online survey, due to the large sample size that was required. To reach participants effectively, the questionnaire was distributed online through social media (WhatsApp, Facebook and LinkedIn) with a link to the questionnaire. Because the participants got the opportunity to share the link of the questionnaire with other people, convenience sampling was possible.

In order to stimulate the approached individuals to fill in the questionnaire, an incentive (chance to win two gift cheques to the value of €25,-) was communicated. It was explained to the participants that if they want to have a chance to win, they must fill in their e-mail address at the end of the survey. In addition to that, the respondents were required to answer each question before they were allowed to continue the survey. In this way, there were no missing values for this research.

### 3.4 PARTICIPANTS

Dutch women and man familiar with holiday booking were the respondents for this study. After a one-week survey period, a total of 523 participants filled in the questionnaire. Since participants with the age of 17 or lower were not allowed to fill in the questionnaire without parental consent, minors were excluded from the dataset. Additionally, the participants who failed to complete the survey for more than 70 % were also removed from the dataset. After cleaning the dataset, the sample consisted of N=409.

The demographic questions were the basis for the profile of the subjects, summarized in table 3.4.1. The total sample consisted of 134 male and 275 female participants. The age of the sample group ranges from 18 to 70 years old, with an average age of 31 (SD=12.70). Additionally, the majority of the respondents are higher educated, with 51.3% that have or are



currently doing an HBO (Bachelor of Applied Sciences) study and 15.4% that have a or are getting a Master's degree. The rest of the participants have a MBO (college degree) (23.2%) or high school diploma (10% in total).

A large part of the target audience (33.5%) indicated that they have been 4 to 5 times on a holiday in the last 2 years, with an average is 5.74 times. As expected, a large proportion of the target audience has experience with online booking. The majority of the respondents made between 4 to 5 online bookings in the past two years, with an average of 4.57.

**Table 3.4.1 - Demographic information of respondents**

		<i>N = 409</i>	
<i>Measure</i>	<i>Items</i>	<i>Freq.</i>	<i>%</i>
Gender	Male	134	32.8
	Female	275	67.2
Age	Younger than 20	28	6.8
	20-24	165	40.3
	25-29	64	15.6
	30-34	26	6.4
	35-39	19	4.6
	40-44	18	4.4
	45-49	27	6.6
	50-54	34	8.3
	55-59	18	4.4
	Older than 60	10	2.4
Education	Vmbo / mavo	30	7.3
	Havo	6	1.5
	Vwo	5	1.2
	MBO	95	23.2
	HBO	210	51.3
	WO	63	15.4
Number of holidays last two years	0-1	14	3.4
	2-3	75	18.5
	4-5	137	33.7
	6-7	77	19.0

	8-9	54	13.3
	10-11	29	7.1
	12 or more	20	4.9
How often booked holiday online	0-1	45	11.1
	2-3	115	28.3
	4-5	135	33.2
	6-7	54	13.3
	8-9	32	7.9
	10-11	10	2.5
	12 or more	16	3.9

All the participants were randomly assigned to one of the eight conditions. In table 3.4.2. an overview is given off the distribution of the respondents amongst the different conditions including the demographic variables gender and age.

**Table 3.4.2 - Demographic information of respondents per condition**

Conditions		Gender		Age
<i>Cancellation policy</i>	<i>N participants</i>	<i>Male</i>	<i>Female</i>	<i>Mean (SD)</i>
(1) SP X SC	52	19	33	34.29
(2) SP X SC	43	10	33	28.58
(3) SP X SC	53	19	34	32.08
(4) SP X SC	55	21	34	30.60
<i>No cancellation policy</i>				
(5) SP X SC	53	23	30	31.47
(6) SP X SC	54	11	43	31.11
(7) SP X SC	49	18	31	30.47
(8) SP X SC	50	13	37	32.62

### 3.4 STIMULUS MATERIALS

The first screen of the online survey showed a short introduction, which consisted of an estimated response time and a short summary about the purpose of the study. Furthermore, the anonymity of the questionnaire was guaranteed in this text, in order to avoid social desirable answers. Participants were also reminded that they could stop participating in the survey at any time.

Before the questions about the dependent variables were asked, the participants were shown a scenario which described a situation. In the scenario a preference for a budget, destination and amount of stars were given.

The respondents received the following scenario:

*“Imagine, you want to go on a holiday with your partner to Gran Canaria and therefore you are looking for a hotel on a booking website. You are looking for a hotel with 4 stars and your budget is about €650 till €700 for 6 nights. You have no preference for a specific city on the island.*

The price range was chosen based on the estimated response group. It was namely expected that a large part of the participants would be students between the 18 and 25 years old. The number of stars was also based on this group, since it is not likely that students will visit 5 stars hotels. After this scenario, participants were randomly assigned to one of the different conditions which included a screenshot of a hotel advertisement. The stimulus material was based on the given ‘preferences’ mentioned in the scenario, in order to avoid biases based on these aspects. Furthermore, the visual, room-rates and scenario were the same for all the conditions. Two examples of the manipulations are shown in Figure 3.4.1 and Figure 3.4.2.



**Cordinal Biarritz**  
Playa del Inglés

★★★★

GRATIS annuleren

**€670**

Nog maar 2 kamers vrij voor deze prijs

Toon beschikbare kamers

Erg goed 8,2  
17 beoordelingen

NET GEOPEND!

Figure 3.4.1. – Scarcity \* social proof \* lenient cancellation (condition 1)



**Cordinal Biarritz**  
Playa del Inglés

★★★★

Nog geen recensies  
Beoordeel dit hotel als eerste

**€670**

Toon beschikbare kamers

NET GEOPEND!

Figure 3.4.2 – No scarcity \* no social proof \* no cancellation (condition 8)

### 3.5 MEASUREMENTS

Most of the measure items included in this research were based on prior research in the field of e-commerce. In the following paragraphs the different measures will be discussed.

The first part of the survey was designed to obtain the respondent's demographic and behavioural characteristics, like gender, age, and experience with online bookings. After these questions, the covariate attitude towards online booking was measured. By measuring this construct before the treatment, an influence due to the manipulation was avoided. The scale for attitude towards online booking is based on the research of Ellen, Mohr and Webb (2000), and included questions like "Online booking is a good-bad idea". For this covariate a 5-point semantic differential scale was used.

The second part of the survey (after the assignment to a particular manipulation) contained of questions related to the dependent variables such as purchase intention, attitude towards the product and attitude towards the advertisement. Most of the items that were used in order to test these measures are borrowed from previous studies. However, some of the items had to be reviewed to fit this particular case. For instance, product had to be replaced with hotel in several statements. Purchase intention was tested with a scale adopted from Dodds, Monroe, & Grewal, 1991 and Grewal, Monroe and Krishnan (1998). All the items consisted of statements with a five-point Likert scale, ranging from (1) "strongly agree" to "strongly disagree" (5). An example of a statement is "I consider booking this hotel". Items for measuring the respondents' attitude towards the product and attitude towards the advertisements were adapted from the scales developed by Ellen, Mohr and Webb (2000) and Neelamegham and Jain (1999). Participants had to determine their attitude by choosing between e.g. attractive / unattractive on a 5-point semantic differential scale.

In order to determine the reliability of the constructs, factor analyses were conducted. After the factor analyses, it appeared that no items had to be deleted. After the factor analyses, Cronbach's  $\alpha$  scores were calculated. All alpha scores are above .700, which indicates that the constructs have an sufficient level of reliability (Hinton, 2008). In table 3.5.1. the reliability scores per construct are shown.

**Table 3.5.1. - Reliability analysis**

<i>Construct</i>	<i># Items</i>	<i>Crohnbach's <math>\alpha</math></i>
Attitude towards online booking	4	.861
Attitude towards the product	4	.901
Attitude towards the advertisements	4	.881
Purchase intention	3	.789

The last part of the survey contained of a manipulation checklist, which tested the effectiveness of the three proposed moderating variables (social proof, scarcity and cancellation policy). The measures asked using a 5-point Likert scales. The effectiveness of the social proof manipulation was measured with the item “This hotel is well reviewed by other people”. For the scarcity appeal, the respondents were asked if they experienced the rooms for the shown hotel as scarce. Therefore, the following questions is asked: “The hotel is almost fully booked”. In order to test the effect of the different cancellation manipulations (“free cancellation” and no indication about the cancellation at all), respondents were asked to identify how they perceived the leniency of the policy they were exposed to on the basis of a statements like “The cancellation policy is lenient”. All the measurements for the manipulations checks were self-created, since no standardized measurements were found in previous research, and asked by only one question. In general, single-item measures can be divided into two categories: (a) items measuring self-reported facts (e.g. age or education), and (b) items measuring psychological constructs, such as job satisfaction. Measuring factors that fall in category A with a single item is commonly accepted practice, yet, using single-item measures for psychological constructs is typically discouraged, since they are presumed to have unacceptably low reliability (Wanous, Reichers, & Hudy, 1997). However, if the variable that is being measured is sufficiently concrete or is unambiguous to the respondent, a single-item measure might be sufficient, according to literature a 1-item questionnaire can be as effective as a multi-item (MI) scale (Sackett & Larson, 1990). In this research, all manipulations are based on extremes (e.g. social proof appeal or no social proof appeal, free cancellation or no cancellation), meaning that there is no discussion possible about if there was a ‘little bit’ social proof present. The question “The hotel is almost fully booked” in combination with a 5-point Likert scale with strongly agree to strongly disagree, gives the respondents the possibility to indicate whether they saw the manipulation banner of scarcity. Therefore, it can be concluded that these single item scales are sufficient as manipulation checks.

## 4 RESULTS

In order to address the research questions formulated in the introduction and the literature review, several models were tested. Section 4.1 starts with a discussion of the tests that are conducted in order to check the effectiveness of the manipulations. After this, the data is tested on normality in section 4.2. Since the data is not normally distributed, a MANCOVA bootstrapping test was conducted in section 4.3, which shows the main effects and interaction effects of this research. The fourth section elaborates on the results and gives an overview of the supported and not supported hypotheses.

### 4.1 MANIPULATION CHECKS

In order to investigate the effectiveness of the manipulations (social proof, scarcity and cancellation), a factorial between groups analysis of variance (ANOVA) test was performed. The social proof, scarcity and cancellation perceptions were compared between the different conditions. An independent sample t-test was conducted to test the mean differences between the conditions. The results of the tests show that there is a statistical evidence ( $F(1) = 19.97$ ,  $p < .001$ ) that the means of the manipulation check significantly differ between the no cancellation ( $M=3.15$ ,  $SD=.72$ ) and “free cancellation” ( $M=3.49$ ,  $SD=.81$ ) condition. This indicates that the participants that received a “free cancellation” banner perceived the cancellation policy of the advertised hotel as more lenient than the respondents who received stimulus material without a cancellation banner. The same applies for both persuasion appeals; the average score on the question “this hotel is almost fully booked” is statistically higher ( $F(1) = 164.12$ ,  $p < .001$ ) for the respondents that were exposed to the scarcity banner ( $M=3.14$ ,  $SD=1.08$ ) as compared to the respondents that received the manipulation without scarcity ( $M=2.75$ ,  $SD=.92$ ). The respondents in the social proof condition scored higher on the question if the hotel was reviewed well by other consumers ( $M=3.68$ ,  $SD=.83$ ) as compared to the respondents that did not receive a social proof appeal at all ( $M=2.23$ ,  $SD=1.35$ ). Based on these results, it can be concluded that the manipulations in this research were successful.

### 4.2 NORMALITY TEST

A requirement to perform a factorial between groups analysis of variance (ANOVA), is for the independent and dependent variables to have a normal distribution (Ghasemi & Zahediasl, 2012). To determine whether the constructs in this research are normally distributed, a Shapiro-Wilk test for normality was performed. The results show that for all of the constructs p-value is below 0.05, which indicates that the data has no normal distribution. Since the variables are not normally distributed in a statistical manner, a MANCOVA bootstrapping test has been performed. Bootstrapping means re-sampling a 1000 times with replacement from the original sample database (Ghasemi & Zahediasl, 2012). By using the bootstrapping

technique, it is valid to conduct an MANCOVA test on data that is not normally distributed. Additionally, bootstrapping reduces the impact of outliers and therefore increases the reliability of the results (Rubin, 1981).

### 4.3 RESULTS

#### 4.3.1 DETERMINANTS OF ATTITUDE TOWARDS THE ADVERTISEMENT

A MANCOVA bootstrapping test was performed in order to check if the manipulations had a significant effect on the respondents' attitude towards the advertisement. As hypothesized in H2(a), it was found that social proof is a significant influencer of attitude towards the advertisement ( $F(1) = 47.13$ ,  $p < .05$ ). Participants who were confronted with social proof appeals have a significant higher score on attitude towards the product ( $M=3.89$ ,  $SD=0.75$ ) than participants who were not confronted with a social proof appeal ( $M=3.34$ ,  $SD=0.88$ ).

Hypotheses H1(a) and H3(a) are not supported, since there were no significant main effects found for cancellation policies ( $F(1) = .01$ ,  $p = .94$ ), and scarcity ( $F(1) = 1.20$ ,  $p = .27$ ) on the respondents attitudes towards the advertisements. The same applies for the interaction effects of cancellation and scarcity ( $F(1) = .75$ ,  $p = .39$ ), and cancellation in combination with scarcity and social proof appeals ( $F(2) = .97$ ,  $p = .38$ ).

There is, however, a two-way interaction found between cancellation and social proof ( $F(1) = 4.25$ ,  $p = .04$ ), whereby the lines in Figure 4.2.1. are not parallel. The chart shows that respondents in the social proof conditions without a cancellation policy signal, have a more positive attitude towards the advertisement as compared to respondents in the social proof condition with free cancellation. In the conditions without social proof, the respondents with free cancellation have a more positive attitude towards the advertisement as compared to the respondents without cancellation. Furthermore, attitude towards online booking showed a significant result as a covariate ( $F(1) = 12.09$ ,  $p < .05$ ).

**Table 4.3.1** – MANCOVA attitude towards advertisement

<i>Factor</i>	<i>DF</i>	<i>F</i>	<i>P</i>
Scarcity	1	1.20	.27
Social proof	1	47.13	.00
Cancellation	1	.01	.94
Cancellation * scarcity	1	.75	.39
Cancellation * social proof	1	4.25	.04
Cancellation * scarcity * social proof	2	.97	.38
Attitude towards online booking	1	12.09	.00

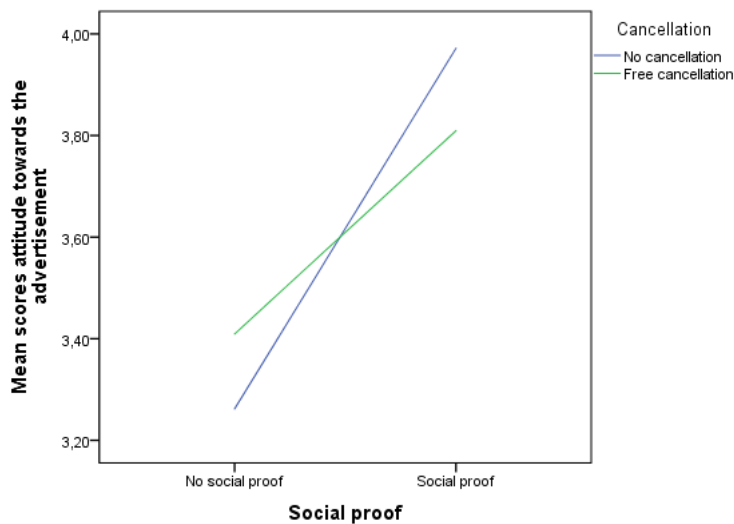


Figure 4.3.1 – Interaction effect of social proof and cancellation on attitude towards the advertisement

#### 4.3.2 DETERMINANTS OF ATTITUDE TOWARDS THE PRODUCT

In table 4.2.2, the results of the MANCOVA bootstrapping for the dependent variable ‘attitude towards the product’ are shown. There are no significant effects found of scarcity on attitude towards the product ( $F(1) = 1.17$ ,  $p = .28$ ), as well as for cancellation policy on the attitude towards the product ( $F(1) = .20$ ,  $p = .66$ ).

The relationship between social proof and attitude towards the product appears to be statistically significant ( $F(1) = 16.39$ ,  $p = .01$ ) and is thereby supporting H3(b). Respondents appeared to have a significant different attitude towards the product in case of social proof appeals ( $M = 4.18$ ,  $SD = .68$ ) as compared to no social proof appeals ( $M = 3.91$ ,  $SD = .75$ ). There are no significant effects found for the interaction of cancellation policy and scarcity ( $F(1) = .18$ ,  $p = .71$ ), cancellation policy and social proof ( $F(1) = .60$ ,  $p = .44$ ) and cancellation in combination with scarcity and social proof ( $F(2) = 1.02$ ,  $p = .87$ ). The results for the covariate show that there is a significant influence of attitude towards online booking on attitude towards the product ( $F(1) = 9.45$ ,  $p = .01$ ).

**Table 4.3.2 – ANOVA attitude towards product**

Factor	DF	F	P
Scarcity	1	1.17	.28
Social proof	1	16.39	.00
Cancellation	1	.20	.66
Cancellation * scarcity	1	.18	.67
Cancellation * social proof	1	.60	.44
Cancellation * scarcity * social proof	2	1.02	.36
Attitude towards online booking	1	9.45	.00



#### 4.3.3 DETERMINANTS OF PURCHASE INTENTION

The results of the MANCOVA test show that social proof appeals have a significant influence on purchase intention ( $F(1) = 46.68$ ,  $p=.01$ ). The results show that consumers' purchase intention was higher in case of a social proof appeal ( $M=3.42$ ,  $SD=.74$ ) as compared to no social proof ( $M=2.88$ ,  $SD=.85$ ). Therefore, hypothesis H3(c) is supported.

Furthermore, the results show that scarcity ( $F(1) = .03$ ,  $p =.87$ ) and cancellation ( $F(1) = 1.16$ ,  $p=.29$ ) have no significant influence on purchase intention. Additionally, the hypothesized positive interaction effects of social proof in combination with a cancellation policy, cancellation policy in combination with social proof and cancellation policy in combination with scarcity and social proof appeals are not supported, since the p-values were all above the significance threshold of .05. The covariate attitude towards online booking ( $F(1) = .14$ ,  $p =.71$ ) has no significant influence on the outcomes. Table 4.3.3 presents the coefficients of the different variables hypothesised to influence purchase intention.

**Table 4.3.3 – ANOVA purchase intention**

<i>Factor</i>	<i>DF</i>	<i>F</i>	<i>P</i>
Scarcity	1	.03	.86
Social proof	1	46.68	.00
Cancellation	1	1.16	.28
Cancellation * scarcity	1	.08	.77
Cancellation * social proof	1	.43	.51
Cancellation * scarcity * social proof	2	.14	.87
Attitude towards online booking	1	.14	.71

#### 4.4 OVERVIEW TESTED HYPOTHESES

The results of this study show that cancellation policy had no significant main effect on attitude towards the advertisement, attitude towards product and purchase intention. Therefore, H1(a), (b) and (c) are not supported. The same applies for scarcity, which also showed no significant main effects on the dependent variables. Consequently, hypotheses H3 (a), (b) and (c) are not supported. Social proof appeared to have a main effect on all the dependent variables incorporated in this research. As a result of that, hypotheses H2 (a), (b) and (c) are supported. There is one significant interaction effect found for cancellation in combination with social proof on attitude towards the advertisement. The covariate attitude towards online booking has a significant effect on the respondents' attitude towards the advertisement and attitude towards the product, which results in support for hypotheses H4(a) and (b). An overview of all the tested hypotheses is given in table 4.4.1.

**Table 4.4.1. – Overview of tested hypotheses**

<i>Hypotheses</i>		
H1	A lenient cancellation policy has a greater positive influence on (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intention as compared to the absence of cancellation policy.	H1 (a), (b), (c) are not supported
H2	Social proof appeals are perceived to have a greater positive influence on (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intention as compared to the absence of social proof appeals.	H2 (a), (b), (c) are supported
H3	Scarcity appeals are perceived to have a greater positive influence on (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intention as compared to the absence of social proof appeals.	H3 (a), (b), (c) are not supported
H4	A positive attitude towards online booking will positively affect (a) attitude towards the product, (b) attitude towards the advertisement and (c) purchase intention as compared to a negative attitude towards online booking.	H4 (a) and (b) are supported, H4 (c) is not supported

## 5 DISCUSSION

The main objective of this research is to investigate whether social proof, scarcity and cancellation policies have an influence on consumer response within the online booking industry. Therefore, the following research questions were created:

- RQ1 To what extent do social proof, scarcity and cancellation have an effect on consumers' (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intentions?
- RQ2 To what extent do social proof- and scarcity appeals moderate the relationship between cancellation policies and consumers' (a) attitude towards the advertisement, (b) attitude towards the product and (c) purchase intentions?

This chapter gives answer to these main questions based upon the results that are discussed in Chapter 4. The first paragraph elaborates on the results of the research, followed by the limitations of this study and suggestions for future research. After this, the managerial implications are discussed and an overall conclusion of the research will be given.

### 5.1 MAIN FINDINGS

#### MAIN EFFECTS OF CANCELLATION

Based upon the literature review, positive main effects were expected from lenient cancellation on the respondents' attitudes and behavioural intentions as compared to the absence of a cancellation policy. The results of this study show that there are no main effects of cancellation policy on the outcome variables. This is in contrast with the results of previous research (Pei, Paswan & Yan, 2014; Bonfield, Cole, & Schultz, 2010), that showed that lenient cancellation policies have a positive influence on consumers' attitudes and behavioural intentions. A reason for this outcome might be that cancellation policies in the orienting phase of the customer journey are not of big importance. When a consumer identifies their needs and preferences regarding for example place, time frame and price, they are provided with a list of potential hotels that fit these preferences. This is still the orienting phase, where the customer explores the hotel possibilities. The consumers' focus while scanning through these advertisements may not be on cancellation policy, but either on the visuals of the hotels, the information regarding the facilities and/or the hotel price. The next step for a customer is clicking on one of the advertisements in order to gather more information about the specific hotel, and presumably the exact payment and/or cancellation policy.

#### MAIN EFFECTS OF SCARCITY

The results showed that there are no significant effects of scarcity on the outcome variables. This is not in line with previous research, where significant results were found for a relationship

between scarcity appeals on attitudes and behavioural outcomes, such as purchase intention for holidays (Kaptein & Eckles, 2012; Jeong & Kwon, 2012). A possible explanation for the ineffectiveness of the scarcity appeal might be the respondents' need for uniqueness. The Theory of Need for Uniqueness (NFU) reasons that people have the need to feel moderately unique (Lynn, 1991). One way to differentiate themselves from the public is by choosing for different products or services than the mainstream (Tian, Bearden and Hunter, 2001). In such situations, an individual values the possession of scarce commodities as it enhances one's personality and self-concept (Tian, Bearden and Hunter, 2001; Lynn, 1991; Gietz, Plantsch and Schweidler, 2008). Certain scarcity appeals, such as "limited editions" or "exclusive", can increase purchase intentions amongst people with a high need of uniqueness. However, the scarcity appeal that is used for this research communicates to consumers that many people already have booked the hotel. As a result of that, "the appropriateness of the scarce product as status symbol decreases" and "a higher degree of uniqueness can no longer be achieved by purchasing this product" (Gierl, Plantsch, & Schweidler, 2008, p. 47). If the respondents of this research have a high NFU, it could possibly explain why there a marginally negative effect of scarcity.

Another explanation for the insignificant effect of scarcity might be the respondents' persuasion knowledge. Friestad and Wright (1994) namely state that people develop personal knowledge across time about persuasion attempts and tactics. The activation of this 'persuasion knowledge' involves suspicion about the marketers motives. Persuasion knowledge can help consumers to know when and how marketers try to influence them, which can help them to adaptively respond to persuasion attempts (Friestad & Wright, 1994). Therefore, a high level of persuasion knowledge could have reduced the effect of the scarcity appeal on respondents attitudes and purchase intentions, as the respondents might have evaluated the scarcity appeal as a manipulative marketing tactic. Furthermore, according to Friestad and Wright (1994), education is of importance in developing persuasion knowledge. The development of persuasion coping expertise is strongly influenced by how "much practice a person gets at school, from mass media, adult education by professors or from writings in the popular press in which marketing professionals share their expertise" (Friestad & Wright, 1994, p. 7). Since 69.4% of the respondents is highly educated, the average persuasion knowledge of this sample group might be higher than normal.

#### MAIN EFFECTS OF SOCIAL PROOF

Social proof appeared to have a main effect on all the outcome variables incorporated in this study. This is in line with the theory, as previous research has proved that (electronic) reviews and ratings, both negative as positive, have the potential to influence purchase behaviour of consumers and can influence their attitudes (Richins, 1984; Sparks & Browning, 2010).

Furthermore, reviews are often perceived as superior to marketing communication information, since consumers perceive review information as more up-to-date and reliable (Gretzel & Yoo, 2008). Reviews are especially effective due to the fact that they are perceived to come from a non-marketing dominated source (Richins, 1984). This might also explain that social proof appeals have a greater positive influence on the outcomes of this research as compared to scarcity appeals, since the source of the scarcity heuristic is the marketer.

## INTERACTION EFFECTS

A two-way interaction occurred between cancellation and social proof on attitude towards the advertisement. The interaction shows that advertisements without a social proof appeal and with a lenient cancellation policy, predict more positive attitudes towards the ad, as compared to advertisements without an indication about the cancellation policy. However, for advertisements with social proof appeals, advertisements with a lenient cancellation predict a less positive attitude towards the ad as compared to no indication about the cancellation policy. The results show no three-way interaction effects between the three independent variables. A possible explanation would be that respondents were too much pushed by both the heuristics as well as by the cancellation signal.

## 5.3 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

There are several limitations in this research that should be mentioned in order to correctly interpret the results and which should be taken into account in future research.

**Definition of cancellation policies** - In this research, the definitions of cancellation included “lenient” (free cancellation) and no indication about the cancellation policy at all. A limitation of this research is that it is not examined how the respondents exactly interpreted the conditions without a cancellation policy indication. The participants might have interpreted the advertisements without a cancellation policy as lenient as well. Therefore, for future research it is advised to measure the respondents’ interpretation of an advertisement that does not give an indication about a cancellation policy. Additionally, future research could test other possible cancellation policies in terms of deadlines and fees in order to give full insight in the effectiveness of this variable.

**An examination of other constructs of interest** - This research only focused on cancellation policies, social proof and scarcity appeals as predictors towards the outcomes, however, there are more conceivable antecedents that can be included. Additionally, persuasion knowledge was not measured in this study, although this factor could have a major impact on the results. For example, the scarcity manipulation (“only 2 rooms left for this hotel”) could have been interpreted as false information, causing respondents to fill in the questions about the dependent variables differently. In addition to that, respondents’ need for uniqueness is not

measured. As already mentioned in the previous sections, need for uniqueness can play a role in interpreting scarcity appeals. Therefore, it is advisable for future research to incorporate this factor as a potential moderator.

**Position of the different stimuli in the advertisements** - Another limitation is related to the position of the different stimuli in the advertisements. The positions of the manipulations used in this research were based upon real-life booking websites, however, this might not be the optimal position. It is possible that if the stimuli were placed into other positions, the impact of these stimuli on the dependent variables would have been greater. A recommendation for future research therefore would be to investigate the most optimal place for the different stimulus material.

**Scenario description** - The bigger the group travelling, the greater the chance of a needed cancellation of one of the people due to circumstances. This research gave the respondents an scenario where they should imagine going on a holiday with only their partner. Cancellation policies might play a bigger role when organizing a trip for more than two people, when there is a greater chance of cancellation. Future research can explore the effects of different scenario's and for example time frames (to test the effect of time on the need for cancellation policies).

**Examination of different sample groups** - The distribution of the different characteristics in the sample of this research is another limitation that should be taken into account when interpreting the results. The gender of the sample group is unequally represented, since only 32.8% of the sample is male. In addition to that, most participants (69.4%) are highly educated (Havo, VWO, HBO, WO). It is interesting for future research to test the hypotheses amongst more uniformly distributed age, gender and education groups. It could be the case that the outcomes of the dependent variables differ for, for example, lower-educated people. Another option that could be interesting is testing the independent variables between two different groups: low vs. highly educated respondents or even an examination within different cultures, since Sears, Jacko, & Dubach (2000) argued that the preferences with regards to information display on websites and advertisements vary across cultures. Since people from all over the world make use of booking websites as for example Booking.com, the manipulated signals might be perceived differently by consumers in other parts of the world.

**An examination of different products/services** - Since OTA's are not the only websites that use persuasion heuristics and promote their refund policies (that are similar to cancellation policies), other product types can be assessed (e.g., electronics, clothing, houseware). Conducting this research within other industries might induce different outcomes. Hence,

performing a similar study in diverse business settings, could increase the validity of the research results.

## **5.2 PRACTICAL IMPLICATIONS**

First, this research demonstrated that when it comes to affecting attitudes and booking behaviour in the orienting phase of the consumer, a lenient cancellation policy is not statistically different from showing no indication about the cancellation policy at all. Because the respondents' attitudes and booking intentions are almost identical for the free cancellation condition and no indication about the cancellation policy condition, it is advised to organizations to practice advertisements that show no indication at all. In this way, it is still possible for OTA's to ask for cancellation fees at the next website page (when consumers are clicking through) if needed, and generate some revenue in case of cancellations. However, further research is needed to identify the actual buying behaviour after clicking on these ads, since this research only focused on the effects of cancellation in advertisements showed in overviews. A second practical implication for OTA's is to put emphasis on social proof appeals in their advertisements, since the reviews have a major influence on consumers' attitudes and behavioural intentions. OTA's could for example take a closer look at the position, colour or others design aspects of the reviews in their advertisement. A recommendation for OTA's would be to conduct several A/B tests (comparing two versions of a web page to see which one performs better) to test different versions of social proof appeals in order to optimize the effectiveness of this persuasion tactic. Further, when OTA's strive for the most positive attitude towards the advertisement, they should include social proof appeals in their ads, and are advised not to combine them with free cancellations signals. However, if they want to use ads without social proof appeals, they should provide visitors with free cancellation signals. Last, marketers should be cautious with using scarcity appeals in their overview advertisements, since it can have a negative effects on attitude and behavioural outcomes.

## **5.4 CONCLUSIONS**

It is common knowledge that the number of e-commerce businesses and online booking is increasing every year. The competition is growing and consumers can easily compare prices and conditions on other booking websites. Therefore, it has become more important than ever for OTA's to take a closer look at their advertisements and their effectiveness in order to secure sales in the future. This study examined the influence of social proof and scarcity appeals in combination with cancellation policies on consumers attitudes and purchase intentions in an online booking environment. The results show that social proof appeals in the form of online reviews play an important role in determining attitudes towards the advertisement and product, as well as for purchase intention. However, signalling a lenient cancellation policy in an advertisement does not significantly increase attitudes and behavioural intentions amongst

visitors, while scarcity appeals even appeared to have a marginally negative effect on consumer responses. Furthermore, attitude towards online booking is a predictor towards attitude towards the advertisements as well as on attitude towards the hotel. To conclude, social proof should be highlighted in overview advertisements, while scarcity appeals should be used cautious, since it appeared that it can backfire and even has a marginally negative effect.



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## 7 APPENDICES

### APPENDIX 1 - SURVEY

#### INTRODUCTIE

Beste deelnemer,

Alvast bedankt voor het meewerken aan mijn afstudeeronderzoek voor de Universiteit van Twente.

Tijdens de enquête krijg je een kort scenario te zien waarna een hotel advertentie zal worden weergegeven. Het is belangrijk deze beide goed in je op te nemen. De vragen die vervolgens worden gesteld gaan over uw mening of houding ten opzichte van deze advertentie.

Het beantwoorden van de vragenlijst zal ongeveer 5 minuten duren. Je kunt op elk gewenst moment stoppen. Alle data zal anoniem worden verwerkt.

Onder de deelnemers worden 2 cadeaubonnen verloot t.w.v. €25,-. Als je kans wil maken, vul dan aan het eind van de enquête je e-mail adres in.

Nogmaals bedankt voor je medewerking!

Myrthe Velten  
Studente Communication Studies

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#### DEMOGRAPHIC QUESTIONS

Wat is uw geslacht?

- Man
- Vrouw

Wat is uw leeftijd?

- ...

Wat is je hoogst genoten of huidige opleiding?

- Basisonderwijs
  - Vmbo / mavo
  - Havo
  - Vwo
  - MBO
  - HBO
  - WO
-

Hoe vaak ben je op vakantie en/of weekendjes weg geweest de afgelopen 2 jaar?

- ...

Hoe vaak heb je je vakanties en/of weekendjes weg online geboekt de afgelopen 2 jaar?

- ...

### GENERAL ATTITUDE TOWARDS ONLINE BOOKING (strongly agree-strongly disagree)

Online boeken is...

- Onaangenaam – aangenaam
- Onhandig – handig
- Een slecht idee – Een goed idee
- Onplezierig –Plezierig

### PRESENTATION OF THE SCENARIO

"Je wilt graag 6 dagen met je partner op vakantie naar Gran Canaria en je bent hiervoor aan het rondkijken op een boekingswebsite. Je bent op zoek naar een **hotel** met 4 sterren en je budget ligt rond de €650-€700 per persoon. Je hebt geen voorkeur wat betreft de locatie (stad) op Gran Canaria.



**Cordinal Biarritz**  
Playa del Inglés  
★★★★★  
GRATIS annuleren  
Erg goed 8,2  
17 beoordelingen  
€670  
Nog maar 2 kamers vrij voor deze prijs  
Toon beschikbare kamers

---

### ATTITUDE TOWARDS THE HOTEL (5 point semantic differential)

Bepaal jouw houding ten opzichte van het hotel dat wordt gepresenteerd in de advertentie:

- Negatief - positief
- Onaangenaam - aangenaam
- Niet uitnodigend - uitnodigend
- Onaantrekkelijk – aantrekkelijk

### **ATTITUDE TOWARDS THE AVVERTISEMENT (5 point semantic differential)**

Bepaal je houding ten opzichte van de **advertentie**

- Negatief - positief
- Oninteressant - interessant
- Onaantrekkelijk - aantrekkelijk
- Niet geloofwaardig – geloofwaardig

### **PURCHASE INTENTION (strongly agree-strongly disagree)**

In hoeverre bent u het eens met de volgende stellingen?

- De kans dat ik dit hotel zou boeken is groot
- Ik ben terughoudend dit hotel te boeken
- Ik zou overwegen dit hotel te boeken

---

### **SCARCITY MANIPULATION CHECK (strongly agree-strongly disagree)**

In hoeverre bent u het eens met de volgende stelling?

- Dit hotel is bijna volgeboekt

### **SOCIAL PROOF MANIPULATION CHECK (strongly agree-strongly disagree)**

In hoeverre bent u het eens met de volgende stelling?

- Dit hotel wordt goed beoordeeld door andere consumenten

### **CANCELLATION POLICY MANIPULATION CHECK (strongly agree-strongly disagree)**

In hoeverre bent u het eens met de volgende stelling?

- De annuleringsvoorwaarden zijn schappelijk

---

### **INCENTIVE**

Onder de deelnemers worden twee cadeaubonnen verloot. Indien je hier kans op wilt maken, vul dan hieronder je e-mailadres in. Zo niet, klik dan op volgende >

- ...

---

### **THANK YOU**


Hartelijk dank voor je deelname aan dit onderzoek!



Mocht je nog vragen of opmerkingen hebben, mail mij gerust:

[m.e.b.velten@student.utwente.nl](mailto:m.e.b.velten@student.utwente.nl)

## APPENDIX 2 – STIMULUS MATERIAL



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GRATIS annuleren

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**Cordinal Biarritz**  
Playa del Inglés

★★★★★

GRATIS annuleren

**Nog geen recensies**  
Beoordeel dit hotel als eerste

**€670**

Nog maar 2 kamers vrij voor deze prijs

Toon beschikbare kamers



**Cordinal Biarritz**  
Playa del Inglés



**Nog geen recensies**

Beoordeel dit hotel  
als eerste

**€670**

Nog maar 2 kamers vrij voor deze prijs

Toon beschikbare kamers



**Cordinal Biarritz**  
Playa del Inglés



**Erg goed 8,2**  
17 beoordelingen

**GRATIS annuleren**

**€670**

Toon beschikbare kamers



**Cordinal Biarritz**  
Playa del Inglés



**Erg goed 8,2**  
17 beoordelingen

**€670**

Toon beschikbare kamers



**Cordinal Biarritz**  
Playa del Inglés



GRATIS annuleren

Nog geen recensies

Beoordeel dit hotel  
als eerste

**€670**

Toon beschikbare kamers



**Cordinal Biarritz**  
Playa del Inglés



Nog geen recensies

Beoordeel dit hotel  
als eerste

**€670**

Toon beschikbare kamers

## APPENDIX 2 – NORMALITY TESTS

**Table 4.1.1** - Normality test scarcity

	<i>Scarcity</i>	<i>F</i>	<i>DF</i>	<i>P</i>
Need for cancellation	No	.910	206	.000
	Yes	.898	203	.000
Attitude towards the product	No	.920	206	.000
	Yes	.928	203	.000
Attitude towards the advertisement	No	.960	206	.000
	Yes	.967	203	.000
Purchase intention	No	.951	206	.000
	Yes	.954	203	.000

**Table 4.1.2** - Normality test social proof

	<i>Social proof</i>	<i>F</i>	<i>DF</i>	<i>P</i>
Need for cancellation	No	.881	207	.000
	Yes	.920	202	.000
Attitude towards the product	No	.934	207	.000
	Yes	.918	202	.000
Attitude towards the advertisement	No	.981	207	.006
	Yes	.952	202	.000
Purchase intention	No	.954	207	.000
	Yes	.947	202	.000

**Table 4.1.3** - Normality test cancellation

	<i>Cancellation</i>	<i>F</i>	<i>DF</i>	<i>P</i>
Need for cancellation	No	.865	202	.000
	Yes	.931	207	.000
Attitude towards the product	No	.915	202	.000
	Yes	.935	207	.000
Attitude towards the advertisement	No	.965	202	.000
	Yes	.965	207	.000
Purchase intention	No	.953	202	.000
	Yes	.954	207	.000

### APPENDIX 3 – MEAN TABLES

**Table 4.1 – Means cancellation**

	No cancellation		Cancellation	
	M	SD	M	SD
Attitude towards the product	4.045	0.788	4.036	0.704
Attitude towards the advertisement	3.603	0.896	3.612	0.832
Purchase intention	3.089	0.853	3.203	0.827

**Table 4.2 – Means social proof**

	No social proof		Social proof	
	M	SD	M	SD
Attitude towards the product	3.907	0.784	4.177	0.680
Attitude towards the advertisement	3.335	0.878	3.887	0.752
Purchase intention	2.881	0.849	3.419	0.740

**Table 4.3 – Means scarcity**

	No scarcity		Scarcity	
	M	SD	M	SD
Attitude towards the product	4.073	0.742	4.007	0.750
Attitude towards the advertisement	3.655	0.845	3.559	0.880
Purchase intention	3.159	0.845	3.135	0.838