The influence of proportion positive online reviews and the disclosure of travel companion information on general trust in online reviews, perceived risk, booking intention, and WOM-intention

Course: Communication Studies - Marketing
University: University of Twente
Student name: Elise Haas
Student number: s1601814
Supervisor: Dr. J. Karreman
Co-reader: Dr. A.D. Beldad
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Abstract
Consumers often ask others for advice before they decide to purchase a product or service. Before the advent of the Internet, one could only ask friends and family for advice. But since the rise of the Internet, it has become easier to ask a much larger group of people, even strangers, for advice. When you can just ask friends and family for advice, there is a great chance that they have not experience with the product or service you want to purchase. By asking people who have actually purchased the product or service, it is possible to get a better advice based on real experiences. Therefore, online reviews have become an important aspect in the decision making process of consumers.

Online reviews are studied a lot, because they have an impact on the decision making process of consumers. However, when it comes to online reviews, the proportion of positive online reviews and reviewers’ characteristics are still underexplored. This study takes these aspects into account which provides a valuable addition when it comes to the investigation of the influence of online reviews on consumers’ attitude and intention. To make consumers’ attitude and intention measurable, four variables are introduced, namely general trust in online reviews, perceived risk, booking intention, and WOM-intention.

The context of this study is the travel industry. This industry is used, because many people use online reviews as part of their decision making process in case of booking a hotel online. In this study, the proportion of positive online reviews and the reviewers’ characteristics are manipulated. Regarding the proportion positive online reviews, three different versions are established namely 100% positive online reviews, 70% positive online reviews, and 50% positive online reviews presented in a message set. Regarding to the reviewers’ characteristics, the disclosure of travel companion information is manipulated. The travel companion information of the reviewer can either be disclosed next to an online review or not. When this information is disclosed, it could either be congruent or incongruent to that of the reader. Therefore, three versions are established regarding to the disclosure of travel companion information, namely the disclosure of congruent travel companion information, the disclosure of incongruent travel companion information, and no disclosure of travel companion information.

With the help of an experimental study, the influence of proportion positive online reviews and the disclosure of travel companion information on consumers’ attitude and intention is examined. A total of 198 respondents (74 male and 124 female) participated in this study. All the respondents speak Dutch and had enough Internet experience to book a hotel online. The average age of the respondents was 27.83 years (SD = 9,461). Most of the respondents (48,5%) successfully completed a bachelor degree.

The results of this experimental study indicated that the proportion of positive online reviews do have an effect on perceived risk, booking intention and WOM-intention. This study has revealed that the respondents experience a difference in perceived risk, booking intention, and WOM-intention between the versions 50%-100% positive online reviews presented in a message set, and between the versions 50%-70% positive online reviews presented in a message set. When there are more positive than negative online reviews presented in a message set, consumers experience less risk, are more willing to book the hotel and are more willing to talk positively to others regarding the hotel. No significant difference has been found between the versions 70% and 100% positive online reviews presented in a message set. Besides that, it turned out that the disclosure of travel companion information does not influence consumers’ attitude and intention.

Keywords: online reviews, proportion positive online reviews, travel companion information, trust in online reviews, perceived risk, booking intention, and WOM-intention.
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1. Introduction

People ask other people for advice as part of their decision making process. This applies in both the online and offline world. Sharing an honest opinion from one consumer to another in the offline world is known as word-of-mouth (WOM) messages. In the online world, this phenomenon is known as electronic word-of-mouth (eWOM) messages. Both WOM and eWOM messages are part of the decisive stage in the decision making journey of consumers.

The idea of WOM and eWOM messages is almost the same, asking advice of others as part of a decision making journey. However, eWOM messages differ from traditional WOM messages in several ways. First, consumers obtain traditional WOM messages from a limited number of people. In the online world, however, consumers are able to obtain a lot of information about a product or service from an unlimited number of people. Secondly, traditional WOM messages usually refer to information obtained from friends and relatives. In the online environment this information is from strangers.

Based on the information stated above, it is clear that there is a difference between traditional WOM messages and eWOM messages. During this research, the focus is on eWOM messages. eWOM messages is a wide concept and includes for example online reviews, social media and forums. This study focuses on the influences of online reviews. Online reviews are selected as manipulation material for this study, because it is expected that online reviews play an increasingly important role in the decision making process of consumers. Besides that, it is expected that online reviews become even more important in the (near) future, due to the fact that consumers are nowadays even more connected to the Internet than ever.

The travel industry will be used as the context for this study, because it is a trend that more and more Dutch people book their holiday online. 73% of the domestically bookings (transport and/or accommodation) and 79% of the bookings across the border (Nederlander boekt vakanties online, 2014) are done online. Due to the fact that so many people book their holiday online, online reviews in the travel industry are even more available and used by consumers to get informed and to make a travel-related decision (Gretzel & Yoo, 2008).

Some travel websites disclose personal information about the reviewer next to the review. Examples of disclosed information about the reviewer are (nick)name, profile picture, nationality, kind of journey (holiday trip or business trip), or travel companion (individual travelers, couple, family, groups of friends, business travelers). Readers of online reviews cannot rely on previous interactions with the writer, so they need to infer the trustworthiness of the reviews through some other attributes. Personal information about the writer can help the reader to assess the review. Therefore, doing research on personal information of the reviewer is interesting.

There are already studies done regarding to the disclosure of (nick)name, profile picture and nationality of the reviewer on consumers’ attitude and intention. In general, these studies show that the presence of reviewers’ characteristics can enhance the trustworthiness of the review. However, there is no research done on the impact of the disclosure of travel companion information.

The disclosure of travel companion information is an interesting variable, as it says something about the reviewer and the companion he or she travels with. Travel companion information is very specific and it differs per person and sometimes it even differs per situation. This information can be used by the reader to determine whether he or she can identify with the writer and this may influence the way readers respond to the reviews. Furthermore, by studying the disclosure of travel companion information, it can be considered if the disclosure of travel companion information is beneficial for an organization or not and under which circumstances.
This study will provide practical implications about how to organize the disclosure of travel companion information. It will give insight in why and how companies in the travel-industry should invest resources in collecting and improving their online reviews. It is important for companies to pay attention to online reviews, because online reviews may influence the decision making process of consumers.

Besides the influence of the disclosure of travel companion information on consumers’ attitude and intention, this research is also investigating the influence of proportion positive online reviews presented in a message set on consumers’ attitude and intention. There are many possibilities regarding the proportion of positive and negative online reviews presented in a message set. Therefore, this study focuses on three possibilities, namely 100% positive online reviews, 70% positive online reviews, and 50% positive online reviews. As there is no previous research available concerning the proportion of positive online reviews presented in a message set, the mentioned will be investigated as they are close proportion real time online. By testing these three proportions it is investigated if there is a tipping point in terms of consumers’ attitude and intention.

The combination of proportion positive online reviews and the disclosure of travel companion information is worth to investigate, because it will give insight in how people interpret online reviews. For example, do consumers find it important that the review writer is a similar person as they are, so they can trust the review more? And is there a difference between positive and negative online reviews regarding to consumers’ attitude and intention? To investigate this, the following general research question has been formulated: to what extent do proportion of positive online reviews and the disclosure of travel companion information influence consumers’ attitude and intention?
2. **Theoretical framework**

This theoretical framework provides an overview of background information about the theme of this study. The variables and the reason why these variables are selected will be explained in this section. Besides that, the basic knowledge about the proportion positive online reviews and the disclosure of travel companion information is explained. Previous research is consulted to see if there are already known relations between the independent and dependent variables of this study. Due to the fact that there is no research available on the disclosure of travel companion information, research on related topics is consulted.

2.1. **Online reviews**

Since the rise of the Internet, eWOM, which includes online reviews, is a powerful force in persuasion. eWOM can be defined as “the Internet-mediated opinions and recommendations on products and services from peers” (Xu, 2014, p. 136). Online reviews provide consumers with product information and recommendations from the customer perspective (Lee, Park, & Han, 2008). Consumers use online reviews, because they are often perceived as superior to marketing communication information, especially because consumers perceive it as being more up-to-date, reliable and enjoyable to read (Gretzel & Yoo, 2008). Messages from peers are especially impactful due to the fact that they come from a non-marketing dominated source (Richins, 1984).

It is widely recognized that (electronic) word-of-mouth messages, both positive and negative, have the potential to influence the purchase decision of consumers (Sparks & Browning, 2010; Anderson, 1998; Richins, 1984). Consumers read online reviews before they actually purchase a product, it has become a part of their decision making process. Consumers tend to base the purchase of high involvement products more on consumer reviews than the purchase of low involvement products (Lee, Park & Han, 2008). This because high involvement products are often expensive products whereby the initial buyer often spends considerable time searching product information in order to make the right decision (Gu, Park & Konana, 2012). Besides that, the risk when buying a high involvement product is higher than when buying a low involvement product, because the risk of loss is greater. Loss can for example refer to loss of money or time. Booking a hotel online is a high involvement purchase, because price, location and reviews are carefully considered before purchase.

2.1.1. **Proportion positive online reviews**

The Internet created a world where enormous amounts of images and messages compete for consumer attention (Hoffman & Daugherty, 2013). This also applies to online reviews. The number of online reviews available is increasing and they can be found on different places on the Internet. Therefore, it is expected that people do not read all the content they are exposed to, instead they scan the context. Regarding online reviews, it is expected that consumers scan the context and determine quickly whether a review is positive or negative, or they form directly an opinion on the whole message set rather than on a single review. That is why the proportion positive online reviews is examined in this study. Do consumers see a difference between the different proportions positive online reviews and do they react differently? Due to the fact that there are many possibilities regarding to the proportion positive online reviews presented in a message set, this study will examine the proportions 100%, 70%, and 50% positive online reviews.

Doh and Hwang (2009) stated that “the direction of eWOM messages (positive-negative) affects the customer’s (reader’s) response: customers are more likely to rely on eWOM messages if the direction of the messages are all the same, because the consensus in eWOM represents the degree of agreement between two or more users regarding a product or its performance (p.193).” When the direction of the eWOM messages are all the same, the messages can be more powerful and persuasive (Doh & Hwang, 2009).
However, Doh and Hwang (2009) also found out that negative online reviews can be helpful. They stated that negative online reviews can promote the positive attitude toward the website and increase the credibility of the online reviews. This can be explained by the fact that people become skeptical when only positive reviews are displayed. It could be that the company has removed the negative reviews to create a more positive image about the product, service or company. Negative reviews can be harmful for the product evaluation. However, when there is just one negative review in a 10-messages set, this will not be so harmful. It can even be helpful and reduce skepticism (Doh & Hwang, 2009).

According to Sen and Lerman (2007) both positive and negative online reviews are useful. They stated that negative online reviews have more value to the receiver than positive online reviews, because receivers weight negative online reviews more heavily than positive reviews. Consumers are more likely to consider negative online reviews in their decision making, because consumers do not want to run the risk of loss or a bad bargain. XueMei and ShengQiang (2014) agreed on this, they have found that negative reviews have more powerful persuasiveness; this is especially true for prevention-focused people. But they also stated that organizations should respond to negative reviews in order to protect their reputation and to eliminate negative influences.

### 2.2. Travel companion information

As mentioned earlier, there are differences between WOM messages and eWOM messages. The difference is found in the number of people who can be asked for information and the prior experience with the persons who are asked for information. When reading online reviews, one cannot rely on previous interactions, so they need to infer the trustworthiness of the reviews and the reviewers through other attributes.

Most of the online review websites allow reviewers to create their own profile. The information stated on the profile is public and allows readers to form impressions. Based on those impressions the readers have to infer the trustworthiness of the reviewer and the review (Corritore, Kracher, & Wiedenbeck, 2003). Besides that, the disclosure of reviewers’ characteristics decreases the anonymity of eWOM messages (Xie, Miao, Kuo & Lee, 2011). By avoiding the anonymity of the reviewer, the reader is better able to evaluate the online review (Xu, 2014).

Besides the (nick)name and nationality of the reviewers, more specific information can also be made available. This information could refer to the kind of journey (holiday trip or business trip), or the travel companion for that trip (individual travelers, couple, family, groups of friends, business travelers).

The influence of the disclosure of travel companion information is still unknown and may influence the decision making process of consumers. Travel companion information is quite specific information and therefore this research investigates which role the disclosure of this information plays. The travel companion information could either be disclosed or not. If this information is disclosed, it could either be congruent or incongruent to that of the reader. Due to the fact that there is no research available regarding the impact of the disclosure of travel companion information, existing literature regarding other characteristics of a reviewer is consulted.

Previous studies demonstrated that the characteristics of a communicator have an effect on the way readers perceive the message of the information source (Chaiken, 1980; Chaiken, 1987; Mackie, Worth & Asuncion, 1990). Based on this reasoning, the disclosure of reviewers’ characteristics can play an important role for consumers in their decision making process. Consumers can identify themselves with the communicator, based on the disclosed characteristics of the reviewer. The disclosure of these characteristics provides more transparency.
Studies regarding other reviewers’ characteristics, such as profile picture and geographical information, have been demonstrated that these cues can contribute to the way readers perceive the online reviews (Forman, Ghose & Wiesenfeld, 2008). The disclosure of identity-descriptive information facilitates the shaping of relationships and social attraction that electronic community members value (Ren, Kraut & Kiesler, 2007). The disclosure of identity-descriptive information is used by consumers in shaping the information they provide and the way how they response to these reviews (Forman, Ghose & Wiesenfeld, 2008).

Based on the information stated above, it is expected that the disclosure of travel companion information influences the decision making process of consumers. Based on travel companion information, people can easily identify themselves with the reader or not. During this study, the disclosure of travel companion information will be manipulated. The travel companion information of the writer could either be disclosed or not. If this information is disclosed, it could either be congruent or incongruent to that of the reader. Therefore, this study will manipulate the disclosure of travel companion information with three different versions, namely the disclosure of congruent travel companion information, the disclosure of incongruent travel companion information, and no disclosure of travel companion information.

2.3. Dependent variables
The aim of this study is to investigate the influences of proportion positive online reviews and the disclosure of travel companion information on consumers’ attitude and intention. Consumers’ attitude and intention is a very broad concept, it is about activities in which consumers engage prior to purchase, during and after consumption. Consumers’ attitude and intention are a composite of a consumer’s (1) beliefs about, (2) feelings about, and (3) behavioral intentions toward some object (Kardes, Cline, Cronley, 2010). To make consumers’ attitude and intention measurable, four variables are introduced. These variables are general trust in online reviews, perceived risk, booking intention and WOM-intention. Therefore, the main research question of this study is: to what extent do proportion of positive online reviews and the disclosure of travel companion information influence general trust in online reviews, perceived risk, booking intention, and WOM-intention?

General trust in online reviews is an important concept of consumers’ attitude, because it refers to the believability of the information source (Corritore, Kracher, & Wiedenbeck, 2003). When it comes to online reviews, the reader has to trust in the abilities and expertise of the reviewers. Based on the general trust in the online reviews, an impression is formed of the reviews and the product or service which is reviewed. Before consumers can make a purchase online, there needs to be trust in both the organization which provides the product or service as well as in the reviews. If there is not enough trust, a consumer will not buy something online.

When consumers make a purchase decision, there is always some degree of uncertainty (Murray, 1991). There may be the risk of losing something; this may for example be money. To reduce this risk, consumers obtain information from an experienced source to lower their risk. That makes risk an interesting concept to measure as a concept of consumers’ attitude.

Booking intention is the third dependent variable in this study. In the definition of consumers’ attitude and intention is already stated that it is related to a purchase. Consumers only have the intention to buy something when it feels good and the information they rely on seems believable. By measuring booking intention, the attitude of the consumers is measured.

WOM-intention is the fourth construct. It is about the intention to spread word-of-mouth messages, mostly shared with people nearby such as friends and family. WOM-intention says something about the behavioral intention of consumers after reading online reviews. It gives an indication about the
thoughts of people towards a specific object and the intention to share their thoughts with others (Cheng, Lam & Hsu, 2006).

In the next sections the concepts are elaborated and existing literature is consulted to see if there are already identified relations between the independent variables (proportion positive online reviews and disclosure of travel companion information) and the dependent variables (general trust in online reviews, perceived risk, booking intention and WOM-intention) of this study.

2.3.1. General trust in online reviews
There is not one universally accepted definition for trust. However, a frequently cited definition of this construct is “the willingness to be vulnerable to another party” (Mayer, Davis, and Schoorman, 1995). Trust is important, because it makes it possible for people to live in risky and uncertain situations. It decreases complexity by reducing the number of options people have to consider in a given situation (Corritore, Kracher & Wiedenbeck, 2003). However, in this research it is about the general trust in online reviews. This is about the willingness to be vulnerable to the person who wrote the online review. Since online reviews play an increasingly important role in the decision making process of consumers, it is important for readers to infer the trustworthy of the online reviews. Online reviews differ from traditional WOM messages due to the fact that consumers cannot rely on previous interactions. The reader should use other cues to infer the trustworthy of the source; therefore, consumers could use reviewers’ characteristics in order to evaluate online reviews (Xu, 2014).

2.3.1.1. General trust and proportion positive online reviews
Kusumasondjaja, Shanka and Marchegiani (2012) have investigated the effects of proportion positive online reviews on trust. One of the results of their study is that trust is being reviewed as stronger when consumers read positive online reviews compared to negative online reviews. This indicates that the level of trust in reviews is at highest when there are positive online reviews presented in a message set. However, when there are only positive online reviews presented, consumers can become skeptical (Doh & Hwang, 2009). Therefore, it is expected that the highest level of trust can be generated by presenting a message set with both positive and negative online reviews. However, the turning point for this reasoning is not investigated yet. This research will test three different proportions of positive online reviews (100%, 70% and 50%) and based on that it must be considered whether there is a turning point between those proportions. It is expected that a message set with 70% positive online reviews generates the highest level of trust, because than the majority agree with each other and an individual is influenced by the majority (Lee, Park, & Han, 2008). Based on this, the following hypothesis is established:

H1: General trust in online reviews is the highest in a situation in which there are 70% positive online reviews. General trust in online reviews is the second highest in a situation in which there are 50% positive online reviews. General trust is the lowest in a situation in which there are 100% positive online reviews.
2.3.1.2. General trust and consumer identification

Kusumasondjaja, Shanka and Marchegiani (2012) have studied the role of source identity on trust on travel-related services reviewed. The source identity information examined in their study is the individual’s name, location, age group, length of membership, self-picture and brief explanation about him- or herself. Although this source identity information is not the same as the travel companion information in this study, the results of the study of Kusumasondjaja, Shanka and Marchegiani matter. Due to the fact that they also studied the influence of reviewers’ characteristics, the results of both studies may show considerable overlap. One of the results of the study of Kusumasondjaja, Shanka and Marchegiani (2012) is that an online review with an identified source leads to higher trust than an online review with an unidentified source. Xu (2014) have also done some research regarding to the role of source identity on trust. He focused on the role of profile picture as part of source identity. He found that the presence of a profile picture is an important aspect for consumers to consider the trustworthiness of the review and reviewer. Based on these results, it is expected that the general trust in online reviews is higher in case reviewers’ characteristics are disclosed compared to a case in which the reviewers’ characteristics are not disclosed.

When the travel companion information is disclosed, it could either be congruent or incongruent to that of the reader. The study of Kusumasondjaja, Shanka and Marchegiani (2012) has revealed that the level of trust is higher in case the reader can identify himself or herself with the writer. One can identify himself or herself with another in several ways, for example they come from the same region, have the same name, are of the same gender, are about the same age, or go on holiday with the same composition of travel companion. They share characteristics, which lead to a higher level of trust. Based on this reasoning, it is expected that the level of trust is higher in case the disclosed travel companion information is congruent to that of the reader than when the disclosed information is incongruent to that of the reader.

Based on this reasoning, the following hypothesis is established:

H2: General trust in online reviews is the highest in a situation in which the disclosure of travel companion information is congruent to that of the reader. General trust in online reviews is the second highest in a situation in which the disclosure of travel companion information is incongruent to that of the reader. General trust in online reviews is at lowest in a situation in which the travel companion information of the reviewer is not disclosed.

2.3.1.3. Interaction effect

Kusamasondjaja, Shanka and Marchegiani (2012) found also an interaction effect between review valence and the disclosure of identity-descriptive information. They stated that a positive online review with an identified source with which the reader can identify, has a greater impact on trust than any other form of reviews. However, the result of the study of Kusamasondjaja, Shanka and Marchegiani is based on one review. Since our study focuses on a message set of online reviews and not on one single review, this result of the study of Kusamasondjaja, Shanka and Marchegiani cannot be taken over directly. For this study it is assumed that only positive online reviews in a message set evoke suspicion (Doh & Hwang, 2009). When combining the results of the study of Kusamasondjaja, Shanka and Marchegiani and the study of Doh and Hwang, it is expected that the level of trust is at highest in a situation where there are more positive than negative online reviews and the identity-descriptive information is disclosed and congruent to that of the reader. Based on this, the following hypothesis is established:

H3: The combination of positive and negative online reviews presented in a message set and the disclosure of congruent travel companion information leads to the highest level of general trust in online reviews.
2.3.2. Perceived risk

Perceived risk is an important aspect in the decision making process of consumers. Risk implies that most individuals make purchase decisions under some degree of uncertainty about a particular product and/or brand (Murray, 1991). Risk is primarily related to information search and pre-decision consumer choice (Dowling, 1986). The definition of perceived risk used in this study is as follows: “consumer’s perceptions of the uncertainty and adverse consequences of engaging in an activity” (Dowling & Staelin, 1994, p. 119).

According to Zeithaml and Bitner (1996), consumers perceive a higher level of risk related with the purchase of a service than when purchasing a product. The reason for this is that a service is intangible, nonstandardized, and mostly sold without any guarantees. To reduce risk, consumers tend to gain information via WOM regarding the service in question. Murray (1991) stated that WOM is the most important source to reduce risk. Consumers who perceive a higher level of risk tend to search more actively for information (Arndt, 1967). Booking a holiday is a service which is intangible and difficult to describe. Therefore, consumers tend to rely on (online) reviews from an experienced source to lower their uncertainty and perceived risk (Bansal & Voyer, 2000; Murray, 1991; Olshavsky & Granbois, 1979).

2.3.2.1. Perceived risk and proportion positive online reviews

According to the study of Lee, Park and Han (2008), negative online reviews are perceived as more credible since it may help to prevent a loss. This suggests that negative online reviews evoke more risk in the eyes of the review reader. The thought behind this is that the more negative reactions there are, the greater the chance would be that the negativity is justified. So the more negative reactions in a message set of online reviews, the greater the perceived risk.

If the displayed reviews are all positive, this look produced by the organization and the perceived risk can therefore increase. The reviews may be manipulated, wherein the negative reviews have been removed. People can become skeptical and do not trust the situation (Doh & Hwang, 2009). This can make them see it as a risk to buy the product or service which is reviewed.

Based on the information stated above, it is assumed that the perceived risk is at highest in a situation in which there are 50% positive online reviews and 50% negative online reviews in a message set. In such a scenario, half of the people agree that the product or the service was not satisfying, and so the chance is great that the negativity is justified. A scenario with 100% positive online reviews has also a level of perceived risk, as the message set can be manipulated. This scenario is not as risky as a scenario in which 50% of the reviews are negative. There is a change that really everybody agrees that the product or service is good. It is expected that the perceived risk is at lowest when there are 70% positive online reviews displayed in a message set, because then it seems less likely that the reviews are manipulated and still the majority agrees with each other. Based on this, the following hypothesis is established:

H4: Perceived risk is the highest in a situation in which there are 50% positive online reviews. Perceived risk is the second highest in a situation in which there are 100% positive online reviews. Perceived risk is the lowest in a situation in which there are 70% positive online reviews.
2.3.2.2. Perceived risk and consumer identification

To reduce the feelings of risk and uncertainty related to online reviews, consumers make use of cues. These cues refer to personal information of the reviewer, which can be disclosed in the profile of the review writer or next to a review. The disclosure of these cues leads to more transparency (Forman, Ghose, & Wiesenfeld, 2008). Due to transparency, readers can identify with the writer or not. It is expected that consumers perceive the most risk in a situation whereby the identity-descriptive information of the reviewer is not disclosed. When there is no information disclosed one cannot assess whether the reviewer is the same kind of person as the reader. By being able to identify with the reviewer, the reader can check whether what is written in the review also applies to him or her or not. Based on this, the reader can assess whether there is a risk attached to buying the product or services. For example, when someone without children read a review of someone with children who said the hotel is not good because it is not child friendly, it does not need to be a reason for the reader of not booking the hotel. The risk for the reader is not the same as the writer has experienced, because the reader did not go on the holiday with children. Thus the disclosure of travel companion information makes that the reader can estimate the risk and he or she can estimate if the risk also applies for him or her.

However, it is assumed that the disclosure of travel companion information on its own does not affect the perceived risk. The perceived risk is dependent on the content of the review (positive/negative). More about the interaction effect between proportion of positive online reviews and the disclosure of travel companion information can be found in the next section.

2.3.2.3. Interaction effect

Since there is no main effect expected on the disclosure of travel companion information on perceived risk on its own, an interaction effect between the proportion positive online reviews and the disclosure of identity-descriptive information is examined.

It is expected that perceived risk is the lowest when the travel companion information of the reviewer is congruent to that of the reader in case of positive online reviews. Perceived risk is at highest when the travel companion information of the reviewer is congruent to that of the reader in case of negative online reviews. The reader can identify himself or herself with the writer and if the writer has had a positive or negative experience, the reader will expect the same experience as the writer due to similar characteristics with the reviewer.

In case of incongruent identity descriptive information, the perceived risk depends on different aspects, such as interpretation, content and review valence. When the identity-descriptive information of the writer is incongruent to that of the reader, the reader cannot directly identify with the writer. This could either increase or reduce the perceived risk. For example, when someone without children reads a negative online review in which is stated that the hotel is not child friendly, the readers’ perceived risk of booking the hotel does not have to increase. This also applies the other way around; when someone without children reads a positive online review in which is stated the hotel is very good, thanks to the great animation team for the children, the readers’ perceived risk of booking the hotel does not have to decrease.

Based on the information stated above, the following hypothesis is established: H5: Perceived risk is the lowest in a situation in which there are more positive than negative online reviews presented in a message set and the disclosure of travel companion information is congruent to that of the reader. The perceived risk is the highest in a situation in which there are 50% positive online reviews presented in a message set and the disclosure of travel companion information is congruent.
2.3.3. Booking intention
Booking intention can be defined as the plan to buy a particular good or service in the future (Casaló, Flavián, Guinalíu, & Ekinci, 2015). More specific for this research, it refers to the plan to book a hotel online. Booking a hotel is a typical example of a high involvement product, because price, location and reviews are carefully considered before purchase. Consumers tend to base their purchasing of high involvement products on consumer reviews (Lee, Park & Han, 2008). So, online reviews play an important role for consumers who want to book a hotel.

During the decision making process, consumers commonly address online reviews of other consumers in order to get information about a product or services (Chen, Chai & Xu, 2015; Gretzel & Yoo, 2008). Consumers use online reviews in order to make their decision, because they rely more on online reviews than on marketing dominated sources. Several studies already found a relationship between online reviews and sales (Chen, Chai & Xu, 2015; Chevalier & Mayzlin, 2006).

2.3.3.1. Booking intention and proportion positive online reviews
Chevalier and Mayzlin (2006) stated that a good product generates positive online reviews, and positive online reviews in turn promote sales. According to Donovan and Jalleh (1999), the intention to book a hotel online is higher when consumers are exposed to positive online reviews than when they are exposed to negative online reviews. The expectation is that the booking intention is higher in a situation where there are more positive than negative online reviews. There is no existing research found in which is examined whether there is a difference between 100% positive online reviews and 70% positive online reviews. However, it is expected that booking intention is higher in a situation in which all the reviews are positive compared to a situation in which 70% of the online reviews is positive. If everyone is positive about the reviewed hotel, the positivity should be justified. Based on the information stated above, the following hypothesis is established:

H6: Booking intention is the highest in a situation in which there are 100% positive online reviews.

Booking intention is the second highest in a situation in which there are 70% positive online reviews.

Booking intention is the lowest in a situation in which there are 50% positive online reviews.

2.3.3.2. Booking intention and consumer identification
Forman, Ghose, and Wiesenfeld (2008) stated that the presence of personal information of the review writer leads to more sales. Therefore, it is expected that the disclosure of travel companion information increases booking intention. However, a main effect of the disclosure of travel companion information of booking intention is not expected. Only the disclosure of travel companion information says nothing about the experiences of others. Therefore it is assumed that there is only an interaction effect between proportion positive online reviews and the disclosure of travel companion information on booking intention.

2.3.3.3. Interaction effect
Since there is no main effect expected on the disclosure of travel companion information on its own, an interaction effect between the proportion positive online reviews and the disclosure of travel companion information on booking intention is examined.

Consumers are always looking for a way to identify themselves with others, and that the presence of personal information of the reviewer leads to more sales (Forman, Ghose, & Wiesenfeld, 2008). It is a logical argument that consumers rather book a hotel when the online reviews are (mostly) positive. Therefore, it is expected that positive online reviews which contain identity-descriptive information are beneficial for consumer’s booking intention. Therefore the following hypothesis is established:

H7: Booking intention is the highest in a situation in which there are more positive than negative online reviews presented in a message set and the disclosure of travel companion information is...
congruent. Booking intention is the lowest in a situation in which there are 50% positive online reviews presented in a message set and the disclosure of travel companion information is congruent.

2.3.4. WOM-intention
WOM-intention refers to the intention to spread word-of-mouth messages. These messages are mostly shared with people nearby, such as with friends or family. WOM messages have a strong impact on consumers’ evaluation of products or services and future purchase decisions (Cheng, Lam & Hsu, 2006). With the help of spreading WOM messages, one can express satisfaction or dissatisfaction with a product or service experience (Gremler, 1994). However, spreading WOM messages is also possible before a product or service is purchased, for example to ask advice in advance. WOM messages can either be positive, negative, or neutral. However, in this study it is about the intention to spread WOM messages, not about the content of the messages.

2.3.4.1. WOM-intention and proportion positive online reviews
There is no literature available regarding to the influence of proportion positive online reviews on WOM-intention. However, there are some expectations done on the basis of spreading WOM messages before experiencing a service, in this study booking a hotel. The expectation is that when there are more positive than negative online reviews presented in a message set, the intention to spread messages about the hotel is greatest. This expectation is based on the idea that someone would only talk about hotels which are merely positively evaluated. Based on this the following hypothesis is established:
H8: WOM-intention is higher in a situation where there are more positive than negative online reviews presented in a message set, than in a situation where there are 50% positive and 50% negative online reviews presented in a message set.

2.3.4.2. WOM-intention and consumer identification
The literature which is available regarding to the influence of consumer identification on WOM-intention is about sharing an experience after a product is purchased or a service is experienced. In general, literature stated that consumer identification is empirically associated with sharing positive WOM messages. Sharing positive messages about a product, service or organization to others may provide a means of expressing their own identity (Arnett, German & Hunt, 2003). It is expected that consumers will rather spread WOM messages when the messages they have read are from an identified source, so they know what kind of person wrote the review. However, it is expected that the disclosure of travel companion information on its own does not generate an effect on WOM-intention. It depends on the proportion positive and negative online reviews presented in a message set.

2.3.4.3. Interaction effect
The intention of spreading WOM messages is dependent on the proportion online reviews. It is expected that consumers will rather spread positive WOM messages if the online reviews are also merely positive. Besides that, it is expected that consumers will rather spread messages to others when the messages they have read are from people they can identify with or at least they can see what kind of person wrote the online review. Therefore, it is expected that the intention to spread WOM messages is the highest in case of reading merely positive online reviews in which the travel companion of the writer is congruent. Therefore, the following hypothesis is established:
H9: WOM-intention is the highest in a situation where the disclosure of travel companion information is congruent to that of the reader and the majority of the online reviews are positive. WOM-intention is the second highest in a situation whereby the disclosure of travel companion information is incongruent to that of the reader and the majority of the online reviews are positive. WOM-intention is the lowest in a situation where the travel companion information of the reviewer is not disclosed and 50% of the online reviews is positive.
2.4. Conceptual model
Based on all the given information stated above, a conceptual model is established. Figure 1, shows the conceptual model of this study. The model consists of two independent variables (proportion of online reviews and disclosure of travel companion information) and four dependent variables (general trust in online reviews, perceived risk, booking intention and positive WOM-intention). The expected relationships between the variables are indicated with the help of arrows. These expectations are based on previous studies regarding to the interest of this study.

![Conceptual Model Diagram](image)

Figure 1: conceptual model
3. Method

3.1. Research design and procedure
To test the hypotheses and to address the main research question of this study, a 3 (proportion positive online reviews: 100% positive online reviews, 70% positive online reviews, 50% positive online reviews) x 3 (disclosure of travel companion information: disclosure of congruent travel companion information, disclosure of incongruent travel companion information, no disclosure of travel companion information) experimental design was used. In total, there were nine slightly different versions. Each respondent has seen just one of the versions. After seeing one of the versions, the respondents were asked to fill out a questionnaire.

This study consisted of an electronic questionnaire which was distributed online. The questionnaire was set up with help of Qualtrics. Qualtrics is an online questionnaire tool which can randomly assign respondents to one of the versions. By doing so, nobody had influence on which version was presented to which respondent. The questionnaire was distributed with the help of social media and e-mail. It was possible for (potential) respondents to share the questionnaire, for example through social media. By doing so, a larger group of people was reached.

Before respondents could fill out the questionnaire, they saw an instruction text, a short case and one of the nine versions. The instruction text and the case were the same for all respondents. In the instruction text the response time and purpose of the research were given. This was done to explain why this study was conducted. It was also mentioned that the results of the questionnaire could not be traced back to an individual person. This was done to motivate the respondents to take the time to fill out the questionnaire. Besides that, it was mentioned that their opinion, feelings, and attitude were requested, not their knowledge, so there were no right or wrong answers. This was done to make respondents feel comfortable to fill out the questionnaire.

After the instruction text, a case was shown to the respondents. In the case was stated that the respondents had to imagine that they will book a hotel online with their partner. This case was chosen to imagine, because most people have experienced such a situation or can easily imagine such a situation. The hotel they were planning to book was also shortly described in the case. It must be clear from the text that the hotel was an affordable hotel. When the hotel would be too luxurious it may scare people. They might think that the hotel was financially not in their power to book and this could affect the way they completed the questionnaire. Some basic information of the hotel was given in the case, such as the location and facilities. This was done to give the respondents an impression of the hotel, so they could better empathize the situation.

After reading the case, the respondents were randomly assigned to one of the nine versions. More about these versions can be found in section 3.2. Respondents had to carefully read the version, which exist of a 10-message set of online reviews. For each version the same amount of reviews per set was maintained. This was done to make the versions consistent and to make sure the amount of reviews in a set was not a factor that influenced the results. A message set of 10 reviews was chosen because than for each proportion (100%, 70%, and 50% positive online reviews) a whole number of positive and negative reviews came out. After reading the version, the questionnaire was presented.
3.2. Materials

The aim of this study was to investigate the influence of proportion positive online reviews and the disclosure of travel companion information on general trust in online reviews, perceived risk, booking intention, and WOM-intention. The independent variables in this study are proportion positive online reviews and the disclosure of travel companion information. These independent variables were manipulated in each version. Due to the fact that there are many options regarding to the review valence between online reviews, this study only compared 100% positive online reviews, 70% positive online reviews, and 50% positive online reviews in a 10-message set with each other.

Travel companion information refers to the travel companion of the reviewer on the specific journey which is reviewed. Examples of travel companion are individual travelers, couple, family, groups of friends or business travelers. Websites can either decide to disclose the travel companion information of the reviewer or not. If they decide to disclose this information, it can either be congruent or incongruent with those of the reader. To test this variable, respondents had to imagine booking a holiday with their partner. Otherwise it was not possible to manipulate congruent and incongruent information.

There were nine slightly different versions used for this study. In each version the independent variables (review valence between online reviews and disclosure of travel companion information) were manipulated. Below an overview of the versions used in this study can be found:

- Version 1: 100% positive online reviews and no travel companion information is disclosed
- Version 2: 100% positive online reviews and congruent travel companion information is disclosed
- Version 3: 100% positive online reviews and incongruent travel companion information is disclosed
- Version 4: 70% positive online reviews and no travel companion information is disclosed
- Version 5: 70% positive online reviews and congruent travel companion information is disclosed
- Version 6: 70% positive online reviews and incongruent travel companion information is disclosed
- Version 7: 50% positive online reviews and no travel companion information is disclosed
- Version 8: 50% positive online reviews and congruent travel companion information is disclosed
- Version 9: 50% positive online reviews and incongruent travel companion information is disclosed

The reviews written for this study were based on existing reviews. Positive and negative online reviews written under a three-star hotel with an average score of 7.5 on the website Zoover.nl has been used as a basis. Zoover.nl is an independent website where people can review their experiences on everything that has to do with holidays, such as hotels, campsites and cruises. Reviews written under a three-star hotel with an average score of 7.5 has been used as a basis, because the case description of this study also described a hotel corresponding to a three-star hotel with an average score of 7.5. It has been chosen to describe such a hotel, because it is for most people (financially) accessible, and it is most affordable. By basing the reviews written for this study on existing reviews for a similar hotel, the situation became more realistic. Besides that, the authenticity and diversity of the reviews could be ensured.

The reviews written for this study were both written under the name of a man and a woman. The proportion of reviews conducted under the name of a man or a woman was equal. This was done to
avoid any possible biases when it comes to the disclosure of the opinion of a man or a woman. It might be the case that some of the respondents are biased and think that only women circulate negative reactions, or are more complaining and thus sooner place negative reactions.

The negative online reviews were spread over the message set, so not all the negative reactions were grouped together. The negative reviews can be found both at the top and the bottom of the message set. The names given to the reviewers were common Dutch names, this in order to avoid any bias regarding to foreign names. Dutch names were selected since the survey was distributed among Dutch people.

Below, three examples of the stimulus materials can be found. The first version which is shown below is the version with 70% positive online reviews where congruent travel companion information was disclosed, the second version is the version with 70% positive online reviews where incongruent travel companion information was disclosed and the last version is the version with 70% positive online reviews where no travel companion information was disclosed.

Figure 2: 70% positive online reviews - incongruent travel companion information
Figure 3: 70% positive online reviews - incongruent travel companion information

Figure 4: 70% positive online reviews - incongruent travel companion information
In all the versions colored frames are arranged to indicate where what is displayed. By doing so, the difference between the versions become more clear. In the red frame the name of the reviewer is displayed. In all the versions, the same names are used at the same place. The green frame indicates the travel companion information of the review writer. All the respondents had to imagine booking the hotel with their partner. So the reviews written by someone who visited the hotel with his or her partner should be seen as congruent travel companion information. In the first figure can be seen that all the reviews were written by people who have visited the hotel with their partner. In the second figure can be seen that the reviews were written by people with different travel companion, such as with friends, with children or alone. The travel companion with partner was not mentioned in this version. So this version should be seen as an incongruent version. In the last figure, the green frame is not displayed, because the travel companion of the reviewer is not mentioned. In the purple frame a few words were given that summarize what the review was about. Based on these words, the reader could already indicate whether the review was positive or negative. In the blue frame the review itself was written. All the different versions can be found in appendix I.

3.3. Respondents

An online questionnaire was used to gather the data for the main study. People who could participate in this study were Dutch-speaking people aged 18 years and older with experience with the internet. The questionnaire was conducted in Dutch, so people had to understand Dutch in order to fill out the questionnaire. The minimum age to participate in the questionnaire was 18, because with the age of 18 one is officially an adult. Thus allowed to make own decisions without being given authorization from parents and/or guardians. So, anyone over 18 can choose whether he or she filled out the questionnaire and did not need permission to do so. There was no maximum age to participate. The respondents must have experience with using the Internet, because they had to imagine booking a hotel online. Due to the fact that the questionnaire was only distributed online, there was already a natural selection. It was assumed that if one could fill out the questionnaire online, one had also enough experiences with the Internet to book a hotel online. Therefore, no questions regarding to the Internet experiences of the respondents were asked.

Most of the respondents were invited through Facebook or e-mail to fill out the questionnaire. Everyone had the opportunity to share the link to the questionnaire. This led to the snowball-effect. This means that the distribution started from an initial state of small significance and builds upon itself. The distribution became larger, and more respondents were reached.

A total of 198 respondents (74 male and 124 female) completed the entire survey. The age of the respondents varies from 18 till 61 years old with an average of 27.83 years (SD = 9,461). Most of the respondents, 48,5%, successfully completed a bachelor degree. 13,1% finished their secondary school, 28,3% finished their lower vocational education, and 23,2% completed a master degree. The standard deviation of highest level of education is 1.260.

The tables below give an overview of the distribution of the respondents per version. The distribution of men and women, the average age, and the educational level of the respondents in the versions were examined. This was done to investigate if there was a main difference in the composition of the respondents per version, which could have an influence on the results of this study. It turns out that the composition of respondents is about the same.
Table 1: Distribution man and woman, and average age

<table>
<thead>
<tr>
<th>Review valence</th>
<th>Disclosure of travel companion information</th>
<th>Male</th>
<th>Female</th>
<th>Mean age</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% Congruent</td>
<td></td>
<td>9</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>100% Incongruent</td>
<td></td>
<td>4</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>100% No disclosure</td>
<td></td>
<td>6</td>
<td>14</td>
<td>31</td>
</tr>
<tr>
<td>70% Congruent</td>
<td></td>
<td>7</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>70% Incongruent</td>
<td></td>
<td>6</td>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>70% No disclosure</td>
<td></td>
<td>10</td>
<td>13</td>
<td>27</td>
</tr>
<tr>
<td>50% Congruent</td>
<td></td>
<td>10</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>50% Incongruent</td>
<td></td>
<td>10</td>
<td>15</td>
<td>26</td>
</tr>
<tr>
<td>50% No disclosure</td>
<td></td>
<td>12</td>
<td>11</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>74</td>
<td>124</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 2: Distribution educational level

<table>
<thead>
<tr>
<th>Review valence</th>
<th>Disclosure of travel companion information</th>
<th>Elementary education</th>
<th>VMBO</th>
<th>HAVO</th>
<th>VWO</th>
<th>MBO</th>
<th>HBO</th>
<th>WO</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% Congruent</td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>100% Incongruent</td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>100% No disclosure</td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>70% Congruent</td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>70% Incongruent</td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>70% No disclosure</td>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>50% Congruent</td>
<td></td>
<td></td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>50% Incongruent</td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>50% No disclosure</td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>1</td>
<td>6</td>
<td>12</td>
<td>7</td>
<td>30</td>
<td>96</td>
</tr>
</tbody>
</table>

3.4. Measurements

The questionnaire consisted of three types of questions, namely demographic questions, manipulation check questions, and questions related to the dependent variables. The demographic questions were added to see how the sample looks like. The manipulation check questions were added to test if the respondents understood the manipulation regarding to the proportion positive online reviews and the disclosure of travel companion information. The questions regarding to the dependent variables were related to general trust in online reviews, perceived risk, booking intention, and WOM-intention. These are the items which could be influenced by the proportion positive online reviews and the disclosure of travel companion information. The questions regarding to the dependent variables were adopted from literature. This made the questions more reliable and valid.

3.4.1. Demographic questions

There were just three demographic questions added in the questionnaire. This was done to prevent drop-off of the respondents. Respondents may become concerned by seeing a large number of demographic questions. However, some demographic questions needed to be asked to see what the
characteristics of the sample were. The characteristics of the respondents helped in determining how close the sample reflects the population. The demographic questions in this questionnaire were: “what is your gender”, “what is your age”, and “what is your highest level of education.” These questions were asked at the end of the questionnaire in order to prevent disengagement of the respondent directly at the sight of the demographic questions. Respondents were not obligated to fill in the demographic questions. Another reason for asking the demographic questions at the end of the questionnaire was that if the respondent stopped with the completion of the questionnaire directly after seeing the demographic questions, the rest of the entered data can be used.

3.4.2. Manipulation check
The manipulation check was done for the two independent variables (proportion positive online reviews and the disclosure of travel companion information). The questions regarding to the manipulation check were added to see whether the respondents understood the manipulation or not.

For this study, three different proportions of positive online reviews presented in a message set were tested, namely 100%, 70%, and 50%. The question which was asked in order to check the manipulation regarding to the proportion positive online reviews was as follows:

- What do you think is most applicable on the reviews you just read?
  - All the reviews are positive
  - The majority of the reviews are positive
  - The opinions are divided, half of the reviews are positive about this hotel and the other half is not positive about this hotel

There were also three different versions established in order to manipulate the disclosure of travel companion information, namely a version in which congruent information was disclosed, a version in which incongruent information was disclosed, and a version in which no information regarding to the travel companion information of the reviewer was disclosed. When the travel companion information of the reviewer was disclosed, it could either be congruent or incongruent to that of the reader. All the respondents had to imagine that they would book a hotel with their partner. So, if the reviews in the message set were written by someone who had visited the hotel with his or her partner, this version should be seen as a congruent version regarding to the disclosure of travel companion information. If the reviews were written by people who had visited the hotel with friends, with children, or alone, this version should be seen as an incongruent version regarding to the disclosure of travel companion information. The question which was asked in order to check the manipulation regarding to the disclosure of travel companion information was as follows:

- What do you think is most applicable on the reviews you just read?
  - The travel companion information of the reviewers is not disclosed
  - The travel companion information of the reviewers is disclosed and is equal to the travel companion I am planning to book this hotel with
  - The travel companion information of the reviewers is disclosed, but is not equal to the travel companion I am planning to book this hotel with

The questions which were asked in order to check the manipulation check on proportion positive online reviews and disclosure of travel companion information were pretested. During the pretest, the different versions were clear for the respondents, and therefore none of the versions was changed for the main study.

The table below shows an overview of the answers given by the respondents in the main study regarding to the manipulation check question concerning proportion positive online reviews. The column corresponds to the version which the respondent saw, and the rows correspond with the answer of the respondents. The numbers in the table indicate the number of respondents. With the
help of this cross table, it can be seen that the manipulation of review valence was understood by the respondents, because the large majority (89% in the versions with 100% positive online reviews, 90% in the versions with 70% positive online reviews and 92% in the versions with 50% positive online reviews) gave the correct answer to the question which review valence was presented in the message set they had seen.

Table 3: Manipulation proportion positive online reviews

<table>
<thead>
<tr>
<th>Version</th>
<th>100% positive online reviews</th>
<th>70% positive online reviews</th>
<th>50% positive online reviews</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer of respondents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% positive online reviews</td>
<td>58</td>
<td>1</td>
<td>0</td>
<td>59</td>
</tr>
<tr>
<td>70% positive online reviews</td>
<td>6</td>
<td>53</td>
<td>6</td>
<td>65</td>
</tr>
<tr>
<td>50% positive online reviews</td>
<td>1</td>
<td>5</td>
<td>68</td>
<td>74</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>59</td>
<td>74</td>
<td>198</td>
</tr>
</tbody>
</table>

The same was done with regard to the disclosure of travel companion information. The table below shows an overview of the answers regarding to the manipulation check question concerning the disclosure of travel companion information in the main study. The column corresponds to the version which the respondent saw, and the rows correspond with the answer of the respondents. The numbers in the table indicate the number of respondents. With the help of this cross table, it can be seen that the manipulation of the disclosure of travel companion information was not fully understood by the respondents.

Table 4: Manipulation travel companion information

<table>
<thead>
<tr>
<th>Version</th>
<th>Congruent information</th>
<th>Incongruent information</th>
<th>No information</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer of respondents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congruent information</td>
<td>34</td>
<td>13</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Incongruent information</td>
<td>9</td>
<td>25</td>
<td>3</td>
<td>37</td>
</tr>
<tr>
<td>No information</td>
<td>30</td>
<td>21</td>
<td>60</td>
<td>111</td>
</tr>
<tr>
<td>Total</td>
<td>73</td>
<td>59</td>
<td>66</td>
<td>198</td>
</tr>
</tbody>
</table>
Although, the respondents saw a situation in which the disclosed travel companion information was congruent to that of the respondent, the answers were divided. Slightly more than half of the respondents indicated that they saw a situation in which congruent travel companion information was disclosed. However, approximately half of the respondents indicated that they saw a situation in which no travel companion information was disclosed. A few respondents indicated that they saw a situation in which incongruent travel companion information was disclosed. This means that the manipulation regarding to the disclosure of congruent travel companion was not correctly interpreted by the respondents.

While the respondents saw a situation in which the disclosed travel companion information incongruent to that of the respondents, the answers of the respondents were divided. A small majority has indeed indicated that they saw a situation in which incongruent travel companion information was disclosed. However, there were also many respondents who indicated that they saw a situation in which congruent travel companion information was disclosed, or a situation in which no information regarding the travel companion information was disclosed. This indicates that the respondents did not correctly interpret the manipulation regarding to the disclosure of incongruent travel companion information.

The versions in which no travel companion information was disclosed, was correctly interpreted by the respondents. The large majority (91%) gave the correct answer to the question regarding to the disclosure of travel companion information. This indicates that the manipulation regarding to no disclosure of travel companion information worked well.

3.4.3. Dependent variables

The dependent variables used in this study were general trust in online reviews, perceived risk, booking intention, and WOM-intention. The questions regarding to the dependent variables were asked to find out whether the manipulation of the independent variables had an influence on the dependent variables. In this section the questions which were asked to measure the influence of the independent variables on the dependent variables are covered. All the questions and statements have been translated into Dutch for the questionnaire.

General trust in online reviews was measured by means of a 5-point bipolar scale (Ohanian, 1990). This construct contains the following items: Do you think this online review is dependable/undependable, honest/dishonest, reliable/unreliable, sincere/insincere and trustworthy/untrustworthy.

Perceived risk was measured by using a 7-point Likert-scale (varying from 1 as “strongly disagree” to 7 as “strongly agree.”) The statements used for this construct were based on the study of Sweeney, Soutar and Johnson (1999). Perceived risk was measured with the following items: “I think there is a chance that there will be something wrong with this hotel,” “there is a chance that I will stand to lose money when booking this hotel,” and “this hotel is extremely risky to book in terms of how the experience will be.”

Booking intention was measured by using a 7-point Likert-scale (varying from 1 as “strongly disagree” to 7 as “strongly agree.”) The statements used for this construct were based on a study of Baker and Churchill (1977): “After reading the online reviews, it makes me desire to book the hotel,” “I will consider booking the hotel after I read the online reviews,” “I intend to try the product discussed in the online review,” and “In the future, I intend to book the hotel discussed in the online review.”

The intention to spread (e)WOM messages was measured by using a 7-point Likert-scale (varying from 1 as “strongly disagree” to 7 as “strongly agree”). The items for measuring this construct were
based on several studies (Brown, Barry, Dacin & Gunst 2005; Chen & He, 2003). This construct was measured with four statements: “I am likely to recommend this hotel to my friends,” “If a friend were looking for a hotel, it will be likely that I recommend this accommodation,” “I would talk favorably about this hotel to others,” and “I would get my family/friends to book this hotel.”

For all the dependent variables, the Cronbach’s Alpha was measured. With the Cronbach’s Alpha one can measure the internal consistency, so how closely is a set of items related as a group. This test was performed to measure the scale reliability. The Cronbach’s alpha of general trust was 0.784, of perceived risk was 0.839, of booking intention 0.943 and of WOM-intention 0.966. The outcomes of all the Cronbach’s alphas were above 0.7 which means there was an excellent internal consistency. Therefore, none of the items regarding to the dependent variables was deleted in the analysis.

3.5. Pretest

Before the main study was performed, a pretest was conducted to determine whether or not participants were interpreting questions as the researcher had intended, and to determine whether or not the answers can be analyzed in ways that fit the research. The participants of the pretest were asked to read the instruction, the case and one of the versions. Afterwards they were asked to fill out the questionnaire. Three versions were pretested which together covers all the manipulations. The versions which were pretested are:

- 100% positive online reviews whereby congruent travel companion information is disclosed
- 70% positive online reviews whereby incongruent travel companion information is disclosed
- 50% positive online reviews whereby no travel companion information is disclosed

For the pretest, relatives were asked to fill out the questionnaire. All the respondents participated voluntarily in the pretest as part of a larger study. A total of 10 respondents participated in the pretest. All of them are female. Respondents were not obligated to fill in the demographic questions. All the other questions were obligated. Respondents were between the ages of 22 and 57, whereby one respondent did not fill in the age. The mean age was 26.3 years with a standard deviation of 11.511.

After analyzing the results of the pretest, it looked like the respondents understood the manipulations. The respondents of the pretest were also asked to give feedback on the questionnaire they just filled out. The questions regarding to travel companion information seemed a bit vague for a few respondents. During the pretest there were three statements regarding to travel companion information, namely:

- The travel companion information of the reviewer is disclosed
- The reviewer has been in the hotel with the same kind of travel companions as I am planning
- The reviewer has not been in the hotel with the same kind of travel companions as I am planning

The respondents had to indicate their opinion on these statements on a 7-point Likert-scale (varying from 1 as “strongly disagree” to 7 as “strongly agree.”) After the pretest, it was decided to ask the respondents one question with three answers options. So, the question regarding to travel companion information became as follows:

- Please indicate your opinion regarding to the online reviews you just read:
  - The travel companion information of the reviewers is not disclosed
  - The travel companion information of the reviewers is disclosed and is equal to the travel companion I am planning to book this hotel with
  - The travel companion information of the reviewers is disclosed, but is not equal to the travel companion I am planning to book this hotel with
This question was also pretested, and it seemed that the respondents understood this question better than the previous version. Therefore, this question was included in the questionnaire for the main study.

Another point of feedback was the 5-bipolar scale regarding to the question about general trust in online reviews. The translation of one of the statements was vague for a few respondents. This item was retranslated and pretested again. In this second pretest, none of the respondents mentioned that the translation in the scale was vague. Therefore, the retranslated item was used in the main study.

After analyzing and correcting some items in the pretest, the main questionnaire was set up and distributed. The final version of the main questionnaire can be found in appendix II. The results of the main study are discussed in section 4.
4. Results

4.1. Main effects

The effects of proportion positive online reviews and the disclosure of travel companion information on the dependent variables (general trust in online reviews, perceived risk, booking intention, and WOM-intention) are presented in this section. An ANOVA (analysis of variances) was performed to examine the main effects of the independent variables on the dependent variables. One of the assumptions for performing the ANOVA is that all the populations need to have equal variances. This was tested by performing a Levene’s test. It turned out that all the populations have equal variances, so the ANOVA was performed. With the help of ANOVA, it was examined if there was a significant difference between the groups. If it turned out there was a significant difference between one of the groups, the Bonferroni-method was used to see which groups significantly differ from each other.

4.1.1. Effect proportion positive online reviews on general trust

The hypothesis regarding to the main effect of proportion positive online reviews on general trust is as follows: *general trust in online reviews is the highest in a situation where there are 70% positive online reviews presented in a message set. General trust is the second highest in a situation where there are 50% positive online reviews presented. General trust is the lowest in a situation where there are 100% positive online reviews presented.*

Table 5: Mean scores on the level of trust

<table>
<thead>
<tr>
<th></th>
<th>100% positive online reviews</th>
<th>70% positive online reviews</th>
<th>50% positive online reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N =65) Mean (SD)</td>
<td>(N =59) Mean (SD)</td>
<td>(N =74) Mean (SD)</td>
</tr>
<tr>
<td>General trust</td>
<td>0.647 (0.7079)</td>
<td>2.522 (0.6767)</td>
<td>2.598 (0.6822)</td>
</tr>
</tbody>
</table>

*Note. Conducted with a five-point Bipolar-scale (1 = positive and 5 = negative)*

In table 4, the results of the ANOVA can be found. Based on these results, one can assume that there is no evidence that at least one proportion positive online reviews presented in a message set has a significantly differ rate of general trust in online reviews compared to another proportion tested in this study. So, the respondents of this study considered the online reviews as equally trustworthy, regardless the proportion positive online reviews presented in a message set. This is not in line with the hypothesis established for this scenario. Therefore, the formulated hypothesis is not supported in this study.
4.1.2. Effect proportion positive online reviews on perceived risk

The hypothesis regarding to the main effect of proportion positive online reviews on perceived risk was as follows: perceived risk is the highest in a situation where there are 100% positive online reviews presented in a message set. Perceived risk is the second highest in a situation where there are 50% positive online reviews presented. Perceived risk is the lowest in a situation where there are 70% positive online reviews presented.

Table 6: Mean scores on the level of perceived risk

<table>
<thead>
<tr>
<th></th>
<th>100% positive online reviews</th>
<th>70% positive online reviews</th>
<th>50% positive online reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N =65) Mean (SD)</td>
<td>(N =59) Mean (SD)</td>
<td>(N =74) Mean (SD)</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>37.867 (1.1953)</td>
<td>3.405 (1.1953)</td>
<td>3.633 (0.9761)</td>
</tr>
<tr>
<td></td>
<td>F&lt;0.001</td>
<td>4.941 (1.1748)</td>
<td></td>
</tr>
</tbody>
</table>

Note. Conducted with a seven-point Likert-scale (1 = totally disagree and 7 = totally agree)

In table 5, the results of the ANOVA can be found. Based on these results, one can assume that at least one proportion positive online reviews presented in a message set has a significantly different rate of perceived risk compared to another proportion tested in this study. To see which proportions significantly differ from each other, the Bonferroni-method was used. The results of the Bonferroni test can be found in table 6.

Table 7: P-values on the level of perceived risk

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Review valence</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived risk</td>
<td>100% positive</td>
<td>0.787</td>
</tr>
<tr>
<td></td>
<td>50% positive</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>70% positive</td>
<td>0.787</td>
</tr>
<tr>
<td></td>
<td>50% positive</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>70% positive</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

Based on the results of the Bonferroni test, there is a significant difference between the proportions 50% positive online reviews and 100% positive online reviews and between the proportions 50% positive online reviews and 70% positive online reviews. In both cases, the perceived risk is higher in case of a message set with 50% positive online reviews. There is no significant difference between the proportions 100% positive online reviews and 70% positive online reviews. So, there is no significant difference in the level of perceived risk, regardless if there are 100% or 70% positive online reviews presented in a message set. This is partly in line with the hypothesis established for this scenario. Therefore, the formulated hypothesis is partly supported in this study.
4.1.3. Effect proportion positive online reviews on booking intention

The hypothesis regarding to the main effect of proportion positive online reviews on booking intention was as follows: **booking intention is the highest in a situation where there are 100% positive online reviews presented in a message set. Booking intention is the second highest in a situation where there are 70% positive online reviews presented. Booking intention is the lowest in a situation where there are 50% positive online reviews presented.**

Table 8: Mean scores on the level of booking intention

<table>
<thead>
<tr>
<th></th>
<th>100% positive online reviews</th>
<th>70% positive online reviews</th>
<th>50% positive online reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N = 65)</td>
<td>(N = 59)</td>
<td>(N = 74)</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Booking intention</td>
<td>42.575</td>
<td>4.985 (1.1162)</td>
<td>4.653 (1.2079)</td>
</tr>
<tr>
<td></td>
<td>3.128 (1.5130)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Conducted with a seven-point Likert-scale (1 = totally disagree and 7 = totally agree)*

In table 7, the results of the ANOVA can be found. Based on these results, one can assume that at least one proportion positive online reviews presented in a message set has a significantly different rate of booking intention compared to another proportion tested in this study. To see which proportions significantly differ from each other, the Bonferroni-method was used. The results of the Bonferroni test can be found in table 8.

Table 9: P-values on the level of booking intention

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Review valence</th>
<th>Review valence</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booking intention</td>
<td>100% positive</td>
<td>70% positive</td>
<td>0.441</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50% positive</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>70% positive</td>
<td>100% positive</td>
<td>0.441</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50% positive</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>50% positive</td>
<td>100% positive</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>70% positive</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

Based on the results of the Bonferroni test, there is a significant difference between the proportions 50% positive online reviews and 100% positive online reviews and between the proportions 50% positive online reviews and 70% positive online reviews. In both cases, booking intention was lower in case of a message set with 50% positive online reviews. There is no significant difference between the proportions 100% positive online reviews and 70% positive online reviews. So, there is no significant difference in the booking intention, regardless if there are 100% or 70% positive online reviews presented in a message set. This is partly in line with the hypothesis established for this scenario. Therefore the formulated hypothesis is partly supported in this study.
4.1.4. Effect proportion positive online reviews on WOM-intention

The hypothesis regarding to the main effect of review valence on WOM-intention was as follows: *WOM-intention is higher in a situation where there are more positive than negative online reviews presented in a message set than in a situation where there are 50% positive online reviews.*

Table 10: Mean scores on the level of WOM-intention

<table>
<thead>
<tr>
<th>Review valence</th>
<th>Mean (SD)</th>
<th>Mean (SD)</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% positive online reviews</td>
<td>(N =65)</td>
<td>(N =59)</td>
<td>(N =74)</td>
</tr>
<tr>
<td>(e)WOM-intention</td>
<td>20.518</td>
<td>4.235 (1.4155)</td>
<td>3.958 (1.3851)</td>
</tr>
</tbody>
</table>

*Note. Conducted with a seven-point Likert-scale (1 = totally disagree and 7 = totally agree)*

In table 9, the results of the ANOVA can be found. Based on these results, one can assume that at least one proportion positive online reviews presented in a message set has a significantly different rate of WOM-intention compared to another proportion tested in this study. To see which proportions significantly differ from each other, the Bonferroni-method was used. The results of the Bonferroni test can be found in table 10.

Table 11: P-values on the level of WOM-intention

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Review valence</th>
<th>Review valence</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived risk</td>
<td>100% positive</td>
<td>70% positive</td>
<td>0.833</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50% positive</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>70% positive</td>
<td>100% positive</td>
<td>0.833</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50% positive</td>
<td>&lt; 0.001</td>
<td></td>
</tr>
<tr>
<td>50% positive</td>
<td>100% positive</td>
<td>&lt; 0.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>70% positive</td>
<td>&lt; 0.001</td>
<td></td>
</tr>
</tbody>
</table>

Based on the results of the Bonferroni test, there is a significant difference between the proportions 50% positive online reviews and 100% positive online reviews and between the proportions 50% positive online reviews and 70% positive online reviews. In both cases, WOM-intention is lower in case of a message set with 50% positive online reviews. There is no significant difference between the proportions 100% positive online reviews and 70% positive online reviews. So, there is no significant difference in the WOM-intention, regardless if there are 100% or 70% positive online reviews presented in a message set. This is in line with the hypothesis established for this scenario. Therefore the formulated hypothesis is supported in this study.

4.1.5. Main effects on travel companion information

Hypothesized was that a main effect of the disclosure of travel companion information would occur on general trust in online reviews. It was hypothesized that the level of general trust in online reviews is the highest in a situation in which the disclosure of travel companion information is congruent to that of the reader, second highest in a situation in which the disclosure of travel companion information is incongruent to that of the reader, and the lowest in a situation in which
the travel companion information of the reviewer is not disclosed. Regarding to perceived risk, booking intention, and WOM-intention, no main effects were expected, because it was assumed that the disclosure of travel companion information on its own did not influence these variables. However, for all the variables an ANOVA test was conducted to determine whether a main effect occurred or not. Based on this study, there are no main effects found of the disclosure of travel companion information on general trust in online reviews (F <1), perceived risk (F >1, p=0.361), booking intention (F <1) and/or WOM-intention (F <1). Therefore, the hypothesis regarding to the main effect of the disclosure of travel companion information on general trust in online reviews is not supported in this study.

4.2. Interaction effects

It was expected that an interaction effect would occur between the proportion positive online reviews and the disclosure of travel companion information on perceived risk, booking intention, and WOM-intention. Hypothesized was that perceived risk is the lowest in a situation where there are more positive than negative online reviews and the travel companion information is congruent and that perceived risk is the highest in a situation where there are 50% positive online reviews presented in a message set and the disclosed travel companion information is congruent. It was also hypothesized that booking intention is the highest in a situation in which there are more positive than negative online reviews presented in a message set and the disclosure of travel companion information is congruent and that booking intention is the lowest in a situation in which there are 50% positive online reviews presented in a message set and the disclosure of travel companion information is congruent. The hypothesis regarding to WOM-intention was that the intention to spread WOM messages is higher in a situation where there are more positive than negative online reviews presented in a message set, than in a situation where there are 50% positive and 50% negative online reviews presented in a message set.

However, based on this study it turned out that there is no significant evidence that there is an interaction effect between the proportion positive online reviews and the disclosure of travel companion information on general trust in online reviews (F <1), perceived risk (F <1), booking intention (F <1) and/or WOM-intention (F <1). Therefore, the formulated hypotheses are not supported in this study.

5. Discussion of the results

The main goal of this study was to determine the influence of proportion positive online reviews and the disclosure of travel companion information on general trust in online reviews, perceived risk, booking intention, and WOM-intention. This study started with a literature review to get an overview of background information about the theme of this study. Based on this background information, hypotheses were established. To test these hypotheses and to address the main research question, a 3 (proportion positive online reviews: 100% positive online reviews, 70% positive online reviews and 50% positive online reviews) x 3 (disclosure of travel companion information: congruent disclosure, incongruent disclosure, and no disclosure) experimental design was established.

In this section, the results of this study will be discussed. The limitations will be explained and possibilities for future research are proposed. The practical implications of this research will also be mentioned.

Based on the results of this study, it can be derived that the different proportions of positive online reviews presented in a message set have an effect on perceived risk, booking intention, and WOM-intention. The difference is found between the proportions 100%-50% positive online reviews and between the proportions 70%-50% positive online reviews. There was no difference found between the proportions 100%-70% positive online reviews. Besides that, this study found that there is no
difference between the different proportions of positive online reviews on the general trust in online reviews. In the following paragraphs possible explanations for the results of this study are presented.

That no difference was found between the different proportions of positive online reviews on general trust in online reviews may be explained by the fact that trust is about “the willingness to be vulnerable to another party” (Mayer, Davis, and Schoorman, 1995). Trust is not about buying a product; it is about believing what is written. Believing what is written does not depend on the direction of the message; it does not matter whether a message is positive or negative, you may or may not believe what is written. Apparently, readers do not make a difference in reading positive or negative online reviews when it comes to determine the level of trust. It was expected that readers might be skeptical when they only see positive online reviews presented in a message set (Doh & Hwang, 2009). That turns out not to be the case. Readers probably assess the reviews as separate aspects and do not look at the total message set. In addition, trust has to do with the content of the reviews. Supposedly, the content of the online reviews used in this study were written in such a way readers consider them as trustworthy.

The difference in perceived risk between the proportions can be explained by the fact that the level of perceived risk increases as more negative online reviews are presented in a message set (Lee, Park & Han, 2008). In the versions with 50% positive and 50% negative online reviews, a large part of the writers agrees with each other that the product or service which is reviewed does not meet the expectations. Therefore, the negativity should be justified. So, the more negative reviews, the greater the chance that the negativity is justified which increases the perceived risk. When there are more positive than negative online reviews presented in a message set, the perceived risk decreases. This can be explained by the fact that in both versions (70% positive and 100% positive online reviews) the majority of the reviews are positive and therefore the positivity is justified. It appears that the respondents do not make a distinction between 70% and 100% positive online reviews presented in a message set, but that the majority is decisive. It does not matter how big the majority is, as long it is 50% or above.

The significant difference in booking intention between the proportions of positive online reviews presented in a message set is explicable; the intention to book a holiday is higher when consumers are exposed to positive online reviews than when they are exposed to negative online reviews (Donovan & Jalleh, 1999). Therefore, the intention to book a hotel is higher in the versions with 100% and 70% positive online reviews compared to a version with 50% positive reviews. The results of this study showed that there is no difference in the intention to book a hotel between the versions with 70% positive online reviews and 100% positive online reviews presented in a message set. This may indicate that it does not matter for consumers’ how many reviews are positive as long as the majority of the reviews are positive, since the intention to book the hotel which is reviewed was significantly lower for respondents who saw a version in which 50% of the online reviews were positive.

The significant difference in WOM-intention between the proportions of positive online reviews presented in a message set is explicable; respondents are less willing to talk about a hotel which is poorly evaluated in the online reviews. One of the reasons to distribute WOM messages is to give a recommendation to others (Yap, Soetarto & Sweeney, 2013). When a hotel is poorly evaluated by a lot of people, it is likely that the hotel is actually not that good, and no one is recommending a poorly evaluated hotel to friends or family. It turned out that there is no difference found between the versions with 70% positive online reviews and 100% positive online reviews in a message set. This may be explained by the fact that there was just a small difference between 70% and 100% positive online reviews in a 10-message set and in both cases the majority was positive, so the positivity should be justified.
There are no main effects found on the disclosure of travel companion information. There are several explanations for this. The first explanation is that the disclosure of travel companion information on its own causes no effect on general trust in online reviews, perceived risk, booking intention, and WOM-intention. The disclosure of travel companion information on its own says nothing; it depends on the content of the message. Therefore, interaction effects were expected. However, this turned out not to be the case. More about the interaction effects can be found in the next section.

Another explanation for not finding a main effect on travel companion information in this study has to do with the manipulation of travel companion information. The respondents of this study have not interpreted the manipulation correctly. They did not interpret the difference between the disclosure of congruent and incongruent travel companion information correctly. Besides the fact that they did not see the difference between congruent and incongruent, there were also respondents who answered that no information was disclosed while there was travel companion information disclosed. So, the manipulation of the disclosure of congruent and incongruent travel companion information has not worked. Just the version in which no travel companion information was disclosed was understood by the respondents. However, even this version did not cause main effects. So, the manipulation regarding to the disclosure of travel companion information has not led to the desired effect and this might one of the reason why there was no main effect founded on travel companion information.

Due to the fact that the respondents did not understood which version they saw regarding the disclosure of travel companion information, people might not read as concentrated. They do not pay attention to studying the reviews. They probably just scan the reviews, and based on that they form their opinion on the review. Additional information, such as the name or the travel companion information of the reviewer might be thereby overlooked.

There was also no interaction effect in this study. The reason why there was no interaction effect found is probably because the manipulation of the disclosure of travel companion information did not work. However, it might also be the case that there was no interaction effect between the proportion of positive online reviews presented in a message set and the disclosure of travel companion information.

### 5.1. Limitations

Unfortunately, this research has a few limitations. Such as the limitation with regard to the measurement of the effect of travel companion information, the stimulus materials, and the composition of the respondents. These limitations will be explained.

In order to measure how people react by seeing congruent travel companion information, it was needed to conduct a scenario in which they have to imagine booking a hotel with their partner. Therefore, a predetermined scenario was given. This scenario does not have to be the reality for everyone. And this could give a bias, because in a real-life setting, not anyone is booking a holiday with his or her partner. However, booking a holiday with a partner is a situation that most people can imagine or have experienced, that is the reason why such a situation was used for this study. For future research, it would be interesting to set up an experiment which is more in line with the reality of the respondents. Follow-up research may set up four different versions (traveling with partner, with children, with friends, or alone) and assign the respondents to the version which applies to them instead of sketching a scenario which all the respondents have to read and have to imagine.

Giving the respondents a scenario in which they have to imagine booking a hotel with their partner could have also an effect on how people react on seeing incongruent travel companion information. It may be the case that the travel companion with whom the respondent usually travels with is described in one of the reviews that is displayed in a message set with incongruent travel companion
information. This might confuse the respondent, and therefore he or she may give the wrong answer regarding to the disclosure of travel companion information. Therefore, it was important that the respondents read the scenario in the beginning of the questionnaire very carefully. However, the fact that the manipulation on travel companion information apparently has not worked, might indicate that the respondents have not read the scenario in the beginning of the questionnaire properly. It could also be the case that the respondent did not read the description of travel companion information carefully in the message set of online reviews itself.

Manipulating travel companion information is in any case difficult. In the versions where congruent travel companion information is disclosed, all the reviews were written by people who booked the hotel with their partner. On a real review website, it does (almost) not occur that all the reviews are written by people who have been with their partner in that hotel. Almost the same applies for the versions in which incongruent travel companion information is disclosed. In these versions, three types of travel companion are disclosed, namely traveling with children, with friends or alone. On a real review website there would be more variety and probably there are also reviews written by people who have been in the hotel with their partner. Due to the fact that this study contains an experimental design, a fixed setting was presented to the respondents. However, this would never be the same as in real life, which can cause bias.

After analyzing the data of the main study, it turns out that the manipulation regarding to the travel companion information was not fully understood. The respondent did not see the differences between congruent and incongruent travel companion information. The manipulation in which no information was disclosed was understood by the respondents. It was also examined whether the manipulations regarding to the disclosure of travel companion information worked in combination with proportion of positive online reviews. It was found that the all the proportions positive online reviews with no disclosure of travel companion information worked. It was also found that combination 50% positive online reviews and congruent travel companion information is the only combination with disclosed travel companion information that works. There was no direct evidence that could explain why the combination of 50% positive online reviews in combination with congruent travel companion information worked and the other situations in which the travel companion information was disclosed not.

There is also no direct evidence that could explain why all the combinations with no disclosure of travel companion information works. When looking at all the answers that are given regarding to the disclosure of travel companion information, it is remarkable that the answer there is no information given regarding to the travel companion information of the reviewer is mentioned most often. This may indicate that the respondents have not seen the travel companion information, even if it was presented to them. This suggests that people might not read as concentrated. So it may be a coincidence that the versions in which no travel companion information is disclosed worked well and the other options with congruent or incongruent travel companion information did not work. Future research can investigate whether people see that the travel companion information is disclosed next to the review or not, and under which conditions they see it, or in which way it have to be displayed in order to get people read it.

Regarding the composition of the respondents, it is notable that most of the respondents are highly educated and relatively young. More than half of the respondents (61.9%) are 25 years or younger. This is not necessarily a problem, but it makes it more difficult to generalize the results of this study to the rest of the population. However, the sample of this study contains many different kinds of people, both young and old and both high and low educated. There may be not as many elderly and low educated people participated in this study, but they do have participated. This is also a recommendation for future research. It may be interesting to investigate whether there could be a difference in age, gender and level of education.
5.2. Practical implications
The main practical implication of this research is awareness. Many organizations underestimate the impact of online reviews. Some organizations are still ignorant and think only 100% positive online reviews presented in a message set is favorable. Besides awareness, this research gives insight in how and why organizations should invest resources and improving their online reviews. The results of this study have shown that online reviews definitely have an impact on consumers’ attitude and intention. To be more specific, the proportion positive online reviews influence perceived risk, booking intention, and WOM-intention. It turned out that there is no difference between 100% positive online reviews and 70% positive online reviews regarding the perceived risk, booking intention and WOM-intention. This is an important fact, as it turns out that it does not matter if there are negative online reviews in a message set, as long as the majority of the reviews are positive. Organizations that have reviews on their website do not need to worry if there are negative reviews posted. However, the way they deal with negative reactions is interesting, but not part of this research. A suggestion for future research is investigating what strategy is best to use when negative reviews are posted.

There are no practical implications regarding to the disclosure of travel companion information, since the manipulation of this variable was not successful. However, it is interesting for further research to find out the effect of the disclosure of travel companion information. Because it can serve as a guideline for organizations in how to deal with the disclosure of travel companion information. So the suggestion for future research is manipulating the disclosure of travel companion information in another way. Perhaps, show the travel companion information of the reviewer more prominent so that the reader noticed that this information is disclosed. This can be done for example by giving it a different color or by giving it a larger font. Of course, the effect of the way how it is displayed must also be examined then.

Also interesting for future research is the order of displaying positive and negative online reviews. It may be the case that people remember the last read review and based on that they form their overall impression. If that turns out to be the case, the order of presenting online reviews is an important aspect for organizations to think about and therefore worth to investigate in future research.
6. References

Kusumasondjaja, S., Shanka, T., and Marchegiani, C. (2012). Credibility of online reviews and initial 
of Personality and Social Psychology. 58 (5) 812-822. 
Ohanian, R. (1990) Construction and validation of a scale to measure celebrity endorsers’ perceived 
Consumer Research 6 (2). 93-100 
online communities. Organization Studies, 28(03), 377-408. 
research (11) 697-702 
Sparks, B.A. and Browning, V. (2010). The impact of online reviews on hotel booking intentions and 
relationship: A study in a retail environment. Journal of Retailing, 75 (1), 77-105 
reviews: The role of perceived source credibility and pre-decisional disposition. International Journal 
of Hospitality Management, 30 (1), 178-183. 
Computers in Human Behavior 33, 1364-144. DOI: 10.1016/j.chb.2014.01.02 7. 
XueMei, T. and ShengQiang, L. (2014). The persuas ion effect of hotel online reviews on regulatory- 
focus tourist. Tourism Tribune 29 (10), 61-68. 
motivations and message characteristics: The sender’s perspective. Australasian Marketing Journal 
(AMJ) 21(1). 66-74 
Appendix I: versions

Version 1: 100% positive online reviews where no travel companion information is disclosed

Hona

Atmospherique kamers. De kamers in het hotel zijn mooi en schoon. De schoonmaak is werken echt hard en leveren goed werk. Wij vroegen om extra handdoeken en dat was geen enkel probleem.

Dennis

Zeer goed hotel. We zijn intussen al twee keer terug. Wij hebben een heerlijke vakantie gehad. Het hotel en de kamer zijn mooi en het personeel is vriendelijk.

Mordek

Wij hebben een heerlijke vakantie gehad. Het hotel is gelegen in een mooie omgeving. De kamers zijn schoon en het personeel is zorgvuldig. Wij gaan zeker nog een keer terug.

Joost

Een uitstekend hotel met fijne eten. Dit was voor mij de derde keer dat ik dit hotel bezocht en ook dit jaar voldeden mijn verwachtingen.

Burt

Wat een super vakantie! Volgend jaar komen wij her zeker nog weer. Het eten was goed en de locatie is perfect, iedereen bedankt voor deze fijne vakantie en hier volgend jaar！”

Karin

Hartelijke welkom en gastvrijheid. Het hotel is prachtig en de kamers worden dag na dag schoongemaakt. Wij hebben een heerlijke vakantie gehad en gaan misschien volgend jaar weer naar dit hotel.

Arle

Geweldige vakantie gehad. Ik heb zeer tevreden over het hotel. Het heeft een mooie locatie en het eten is goed. Je krijgt ook veel voor je geld. Karton, een heerlijke vakantie in een geweldige hotel.

Ellen

Net hotel. De kamers zijn ruim en netjes. Het zwembad is erg mooi en je bent zo bij het strand. Het personeel is vriendelijk en geeft graag advies over wat te doen in de buurt.

José

Mooi hotel. Een mooi hotel waar je goed toevoelt. Het personeel is erg vriendelijk en de kamers zijn prima en schoon. Er zijn veel leuke activiteiten te doen in de buurt van het hotel.

Roy

Zeer vriendelijk personeel. Wat een heerlijke vakantie hebben wij gehad! Het hotel is erg mooi en het personeel is heel vriendelijk en wil alles voor je doen. Een echte aanrader.
Version 2: 100% positive online reviews where congruent travel companion information is disclosed

Hana
Vakantie met partner
Meeneem kamers
De kamers in het hotel zijn mooi en schoon. De schoonmakers werken echt kiktard en leveren goed werk. Wij vragen om extra handdoeken en dat was geen enkel probleem.

Dennis
Vakantie met partner
Zeer goed hotel
We zijn met terugroep onze vakantie en hebben het erg leuk gehad. De kamers zijn ruim, het eten is goed en het personeel is vriendelijk. Kortom, een ons goed hotel.

Moniek
Vakantie met partner
Een echte aanrader
Wij hebben een heerlijke vakantie gehad. Het hotel is gelegen in een prachtige omgeving. De kamers zijn schoon en het personeel is aardig. Wij zullen zeker nog een keer terug

Jossie
Vakantie met partner
Uitzichtvriendelijk hotel
Een uitzichtvriendelijk hotel met lekkere etens. Dit was voor ons de eerste keer dat wij in dit hotel verbleven en ook dit jaar voldeed het weer aan al onze verwachtingen.

Bart
Vakantie met partner
Tot volgend jaar
Wat een super vakantie! Volgend jaar komen wij hier zeker nog eens. Het eten was goed en de locatie is perfect. Iedereen beantwoordt voor deze fijne vakantie en tot volgend jaar.

Karen
Vakantie met partner
Heerlijke vakantie gehad
Het hotel is prachtig en de kamers worden eveneens schoon gemaakt. Wij hebben een heerlijke vakantie gehad en gaan misschien volgend jaar weer naar dit hotel.

Arie
Vakantie met partner
Geweldige vakantie gehad
Wij zijn zeer tevreden over het hotel. Het heeft een mooi zwembad en het eten is goed. Zelfs echt waar voor je geld. Kortom, een heerlijke vakantie in een geweldig hotel.

Ellen
Vakantie met partner
Het hotel
De kamers zijn ruim en netjes. Het zwembad is erg mooi en je bent zo bij het strand. Het personeel is vriendelijk en geeft geregeld andere overleg die uitrusting in de buurt.

Josh
Vakantie met partner
Mooi hotel
Een mooi hotel waar het goed en gemakkelijk is. Het personeel is erg vriendelijk en de kamers zijn ruim en schoon. Er zijn veel mooie activiteiten te doen in de buurt van het hotel.

Roy
Vakantie met partner
Zeer vriendelijk personeel
Wat een heerlijke vakantie hebben wij gehad! Het hotel ziet er mooi uit en het personeel is heel vriendelijk en wil alles voor je doen. Een echte aanrader.
Version 3: 100% positive online reviews where incongruent travel companion information is disclosed
Version 4: 70% positive online reviews where no travel companion information is disclosed
Version 5: 70% positive online reviews where congruent travel companion information is disclosed

De kamers leken tevreden en hadden een gunstig effect. Het personeel is vindingrijk en het was geen enkel probleem.

We zijn net terug van onze vakantie en hebben het erg leuk gehad. De kamers zijn ruim, het eten is goed en het personeel is vriendelijk. Kantoor, een zeer goed hotel.

De kamer was zeer mooi en de ontwikkeling van de comoditeit was aanwezig. Het bed was comfortabel en het was een aangename verblijf. Kantoor, een heerlijk hotel.

Het hotel heeft veel minpunten en als je dit hotel boekt moet je dan ook geen luxe en service verwachten. Het eten is er dat je het betreft en ook het hoteliersleek kent weinig vertrek.

Het hotel heeft veel minpunten. Het personeel van de drie afhankelijkheid van het hotel is vriendelijk. Kantoor, een heerlijk hotel.

De hoteliersleek kent weinig vertrek. Kantoor, een heerlijk hotel.

Het hotel is praktisch en de kamers werden elke dag schoongemaakt. Wij hebben een heerlijke vakantie gehad en gaan misschien volgend jaar weer naar dit hotel.
Version 6: 70% positive online reviews where incongruent travel companion information is disclosed
Version 7: 50% positive online reviews where no travel companion information is disclosed

Ilona

"Slechte service"

Het eten is smaakloos, luid en eentonig. De bar in het hotel is ongezellig en donker. Het zwembad en de ligbaden zijn te klein voor alle gasten. Het was voor ons een tegenvaller.

Dennis

"Zeer goed hotel"

We zijn erg tevreden met onze vakantie en hebben het erg leuk gehad. De kamers zijn ruim, het eten is goed en het personeel is vriendelijk. Kortom, een zeer goed hotel.

Moniek

"Een tegenvaller"

Dit hotel heeft veel minpunten. Wanneer je dit hotel boekt moet je geen lachen en service verwachten. Het eten is elke dag hetzelfde en ook het personeel kent welig verbale.

Joost

"Gelijkzinnig hotel"

Een uitstekend hotel met lekker eten. Dit was voor mij de droom van de dromen en ik wil het jaar volledig van mijn verwachtingen.

Bart

"Onvriendelijk personeel"

Het personeel van dit hotel is niet vriendschappelijk. Als je ze wat vraagt krijg je een nors antwoord terug. Het maakt het extra lastig dat bijna niemand Engels spreekt.

Karin

"Heerlijk vakantie gebleken"

Het hotel is prachtig en de kamers worden elke dag schoongemaakt. Wij hebben een heerlijke vakantie gehad en gaan misschien volgend jaar wel weer naar dit hotel.

Arle

"Waar een groenvooler"

Op de plaatsje zit het er mooi uit, maar in het echt viel het tegen. Het restaurant was eigenlijk niet zo gelegen en in de badkamers stonden comfortabel, met was een tegenvaller.

Ellen

"Veel minpunten"

Het hotel viel tegen. Het personeel kan de drukte in het hotel totaal niet aan. Desondanks zijn de kamers niet al te comfortabel. Ik zal dit niet als een 5-sterrenhotel.

José

"Maar hotel"

Een mooie hotel waar het goed doorloopt. Het personeel is erg vriendelijk en de kamers zijn ruim en schoon. Er zijn veel leuke activiteiten te doen in de buurt van het hotel.

Roy

"Zeer vriendelijk personeel"

Wat een heerlijke vakantie hebben wij gehad! Het hotel ziet er mooi uit en het personeel is heel vriendelijk en wil alles voor je doen. Een echte aanrader.
Version 8: 50% positive online reviews where congruent travel companion information is disclosed
Version 9: 50% positive online reviews where incongruent travel companion information is disclosed
Appendix II: questionnaire

Beste respondent,


Alvast bedankt voor je deelname.

Met vriendelijke groet,

Elise Haas

Wanneer je deze enquête via een mobiele telefoon invult, is het aan te raden het scherm horizontaal te draaien om de leesbaarheid van de beoordelingen te vergroten.

Stel je de volgende situatie voor:


Voordat jullie dit hotel daadwerkelijk gaan boeken wil je toch nog beoordelingen lezen die anderen over dit hotel hebben geschreven. Op het volgende scherm vind je een aantal beoordelingen van het hotel dat jullie willen gaan boeken.

Lees onderstaande beoordelingen aandachtig door, klik vervolgens op volgende en beantwoord de vragen.

One of the nine versions is presented here.
Wat vind jij dat het meest van toepassing is op de net gelezen beoordelingen?

- Alle beoordelingen over dit hotel zijn positief
- Het merendeel van de beoordelingen over dit hotel zijn positief
- De meningen zijn verdeeld, de ene helft van de beoordelingen over dit hotel is positief en de andere helft van de beoordelingen is niet positief

Wat vind jij dat het meest van toepassing is op de net gelezen beoordelingen?

- Het reisgezelschap van de beoordelaars wordt niet vermeld
- Het reisgezelschap van de beoordelaars wordt vermeld en is gelijk aan het soort reisgezelschap waarmee ik dit hotel wil boeken
- Het reisgezelschap van de beoordelaars wordt vermeld, maar is niet gelijk aan het soort reisgezelschap waarmee ik dit hotel wil boeken

Geef aan in hoeverre je het eens bent met de volgende stellingen. De beoordelingen zijn:

- Afhankelijk
- Eerlijk
- Te vertrouwen
- Oprecht
- Betrouwbaar

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<tr>
<th>Afhankelijk</th>
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<tr>
<td>Oprecht</td>
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<td>Te vertrouwen</td>
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Geef aan in hoeverre je het eens bent met de volgende stellingen:

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<th>Elke eneke maal met het hotel dat ik wil boeken</th>
<th>Gedeeltelijk met een hotel dat ik wil boeken</th>
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<tr>
<td>Na het lezen van de beoordelingen wil ik dit hotel boeken</td>
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<td>Na het lezen van de beoordelingen overwoog ik dit hotel te boeken</td>
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<td>Ik ben van plan het hotel te boekten dat wordt besproken in de beoordelingen</td>
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<td>In de toekomst ben ik van plan het hotel te boekten dat wordt besproken in de beoordelingen</td>
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<tr>
<td>Ik zou dit hotel bij mijn vrienden aanraden</td>
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<td>Wanneer vrienden op zoek zijn naar een hotel, is het waarschijnlijk dat ik dit hotel aanbeveel</td>
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<td>Ik zou positief praten over dit hotel tegen anderen</td>
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<td>Ik zou mijn vrienden/familie aanraden dit hotel te boeken</td>
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Ik ben een:

- Man
- Vrouw

Wat is je leeftijd?

[Blank space for input]
Wat is je hoogst afgeronde opleiding?

- Basisonderwijs
- VMBO
- HAVO
- VWO
- MBO
- HBO
- WO

Bedankt voor het invullen van deze enquête.

Heb je vragen of wil je de resultaten van het onderzoek ontvangen? Mail dan naar j.e.haas@student.utwente.nl