

**Fake Negative Online Reviews: A Quantitative Study on How a Warning Label and
Credibility Issues in a Review Affect Consumers' Purchase Intention**

Robin Telman

s2435934

r.e.m.telman@student.utwente.nl

Communication Science, University of Twente

Supervisor: dr. R.S. Jacobs

Second supervisor: dr. S.R. Jansma

10-08-2021

Wordcount: 17768

Abstract

Purpose – The amount of fake reviews on the Internet is growing and shows its big influence on a company's sales. Negative reviews appear to have a greater influence compared to positive reviews on purchase intention and therefore it is important to learn more about it. Especially within the tourism sector people share their experience with other consumers and as a result fake reviews about travel agencies are growing. It appears that consumers within the tourism sector have a feeling that the review they are reading is fake, but consumers still rely on it. However, it has not been studied how certain characteristics of a review that make people perceive a review is fake, is affecting people's purchase intention. Therefore, the study aims to examine the effect on purchase intention of the addition of a warning label to a review, the writing style of the review and the username of the person who wrote the review.

Design/Methodology/Approach – The executed research is an experiment with a 2 (warning label: present or absent) x 2 (writing styles: spelling errors or no spelling errors) x 2 (username: fake or real) between subject design, with credibility and perceived realism as mediators, and involvement as a control variable. In addition, the warning label was tested as an interaction effect on writing style and username.

Findings – This study found no effect of the warning label, writing style, or username on purchase intention. Similarly, neither credibility nor perceived realism appeared to be a mediator in the effect of the three independent variables on purchase intention. The interaction effect of the warning label was not found with the username but did show to decrease the negative effect of writing style on purchase intention. Finally, the manipulation check showed that people did not remember the username of the person that wrote the review. This indicates that people might not have paid full attention when observing the review.

Conclusion/Implications – This study showed no effect of a review that is warned as fake or has credibility issues. In addition, credibility and perceived realism did not show to mediate the effect of the three independent variables on purchase intention. Nevertheless, when a review was written without spelling errors, it showed that adding a warning label increases people's purchase intention. A review without spelling errors makes the review look more real and therefore the negative content of the review lowers the purchase intention. Therefore, the addition of a warning label decreased this negative effect of writing style.

Keywords: fake reviews; online reviews; purchase intention; credibility; warning label; writing style; spelling errors; username; perceived realism; involvement; Trustpilot

Table of content

1.	Introduction	4
2.	Theoretical Framework	5
2.1.	<i>Theories.....</i>	6
2.1.1.	<i>The Theory of Planned Behaviour</i>	6
2.1.2.	<i>The Elaboration Likelihood Model</i>	7
2.1.3.	<i>Source Credibility Model</i>	8
2.2.	<i>Characteristics of a review</i>	9
2.2.1.	<i>Warning label.....</i>	9
2.2.2.	<i>Writing style.....</i>	10
2.2.3.	<i>Username.....</i>	11
2.3.	<i>Review credibility.....</i>	12
2.4.	<i>Perceived realism of reviews</i>	12
2.5.	<i>Relationships between review characteristics.....</i>	13
2.6.	<i>The conceptual model.....</i>	14
3.	Method	15
3.1.	<i>Design</i>	15
3.2.	<i>Sample</i>	16
3.3.	<i>Stimuli</i>	16
3.3.1.	<i>Pre-test.....</i>	16
3.3.2.	<i>Main study</i>	18
3.4	<i>Procedure</i>	22
3.5	<i>Measures</i>	22
3.5.1.	<i>Purchase intention</i>	22
3.5.2.	<i>Source credibility.....</i>	23
3.5.3	<i>Perceived realism</i>	23
3.5.4	<i>Involvement</i>	23
3.5.5	<i>Construct Validity and Reliability</i>	24
4.	Results.....	25
4.1.	<i>Main effects</i>	25
4.2.	<i>Source credibility as mediator.....</i>	26
4.3.	<i>Perceived realism as mediator.....</i>	29
4.4.	<i>Interaction effects.....</i>	32
4.5.	<i>Manipulation check.....</i>	34
4.6.	<i>Additional analyses.....</i>	36
5.	Discussion.....	39
5.1.	<i>Main study</i>	39
5.2.	<i>Practical implications</i>	45
5.3.	<i>Limitations and future research</i>	46
6.	Conclusion.....	48

1. Introduction

Nowadays, people increasingly share their online shopping experiences with fellow customers through writing reviews (Hubert et al., 2017). These customers' reviews might be negative, affecting the sales of the company's products (Reyes-Menendez et al., 2019). A negative review is proven to have a more substantial influence on product sales than a positive review (Lee & Choeh, 2014). Fake reviews are those that are not based on a consumer's genuine opinion of a product or service. For example, the review is written by someone who might not have used the product or service (Valant, 2016). Whenever these fake reviews are negative, this can have a negative impact on company's sales (Cui et al., 2012). However, both negative and positive reviews can be fake. In some online branches more than half of the reviews are fake (Rohr, 2020). This indicates the extent to which fake reviews can produce problems.

People will publish reviews to express their thoughts on a product or service. These ratings are becoming increasingly popular, particularly among travellers (Gretzel & Yoo, 2008). A considerable number of travellers use online review sites to express their own travel experiences (Lee et al., 2011). Within the tourism sector there exists a paradox of fake reviews. It appears that people assume that the reviews that they are reading are not sincere, but they still base their purchase on it. The paradox indicates that people do not solely rely on their own thoughts (Reyes-Menendez et al., 2019). However, it is not clear how strong this phenomenon is and whether it is important for the tourism sector to consider if people purchase a trip based on reviews. This study will therefore try to explain this phenomenon.

Travel agencies are companies that provide travel related services for their customers. These companies depend a lot on consumer reviews. One of the ways in which travellers can share their experiences is through online platforms such as Trustpilot. Trustpilot is an online review service where customers can write and read reviews about a variety of businesses (Trustpilot, 2021). Over the past few years the amount of online review platforms has increased. Because of this increase, the spread of misinformation has become a serious problem (Pitmann, 2020). In order for the consequences of spreading misinformation to remain limited, it is critical for travel agencies to understand to what extent the customers' purchase intention of travellers is influenced by misinformation.

The presentation of a review has an effect on whether people perceive the review as credible, this in turn affects the purchase intention (Jensen et al., 2013). Generally it can be assumed that the credibility of the online reviews is lower than real life word of mouth

information, as in the online world many people are anonymous (Xie et al., 2011). Animosity causes the credibility of the review to decrease as insufficient information is available about the source (Jensen et al., 2013). Due to the paradox of online reviews in travel agencies, the assumption that online reviews are less credible might affect consumers' purchase intention (Xie et al., 2011).

There are multiple characteristics of a review that might make people believe a review is fake (Powell, 2020). Examples of characteristics are the writing style of the review and the realism of the username of the user that wrote the review. In order to see whether different aspects of an online review can affect the purchase intention, three of these aspects were evaluated in this study. The first was attaching a warning label to the review. This is a type of label that is attached to items or messages in order to warn people about the risks associated with the product or message. People's purchasing behaviour is assumed to be influenced by these labels (Halim, 2019). A platform such as Trustpilot has the ability to add warning labels to the reviews that appear to be fake. Second, the writing can create the perception of a fake review. Fake negative reviews are often written with many spelling errors which can influence the purchase intention (Brown, 2020; Powell, 2020). Third, the effect of the realism of the username on purchase intention was tested. A fake username often indicates that a review is fake (Powell, 2020). The username reveals something about the user behind the account. An account is perceived as credible when there is information available about the person behind the account (Hu & Yang, 2020). In addition, fake usernames often contain a lot of numbers (Kashti & Prasad, 2019; Powell, 2020). The warning label, the writing style and the username were analysed in order to see whether these characteristics affect the perceived credibility of the review and whether they influence the purchase intention.

Altogether, this has led to the following research question:

RQ: To what extent do reviews about travel agencies on Trustpilot that are marked as fake or have credibility issues result in differences in purchase intention?

2. Theoretical Framework

In this section, the context of the hypotheses and the research question will be discussed. The theoretical framework is divided into five paragraphs. Firstly, the different theories that are used to develop and explain the hypotheses for this study are considered. Secondly, the first three hypotheses will be explained which focuses on the main effect of the warning label, writing style and username on purchase intention. In the third section, credibility will be

discussed as a mediating variable. As a result, three extra mediation hypotheses were created. Following that, two more hypotheses about the warning label's interaction with writing style and the username were established. The conceptual model that emerged from the development of these hypotheses will be discussed in the last section.

2.1. Theories

Three well-evolved theories will be used to explain people's purchasing behaviour and their reasoning behind the purchase. First, the Theory of Planned Behaviour (TPB) explains consumers' online purchase intentions and links people's beliefs to behaviour (Ajzen, 1975). The theory assumes that people's behavioural intention can be explained by attitude, subjective norms and perceived behavioural control. In this study TPB can explain why people intend to do certain purchases. Second, The Elaboration Likelihood Model (ELM) describes the changes of attitudes by proposing two routes to persuasion: the central route and the peripheral route (Petty & Cacioppo, 1986). ELM helps to understand why certain people get persuaded by fake reviews and others do not. Additionally, ELM can help to understand how people perceive online reviews. Finally, people's behaviour towards fake online reviews will be explained by using the Source Credibility Model. According to the Source Credibility Model, the effectiveness of a communication is determined by the writer's level of expertise, trustworthiness, and attractiveness (Ohanian, 1990). The model will help to explain when and why people believe reviews are credible.

2.1.1. The Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) is used to explain consumers' online purchase intention and predicts people's social behaviour (Ajzen, 2011). According to TPB perceived behavioural control is the strongest determinant of behaviour. This is an indication of how willing an individual is to try to perform a certain behaviour (Ajzen, 1991). The stronger the intention, the more likely a person is to carry out the behaviour (Ajzen, 1991). The TPB is an extension of the Theory of Reasoned Action that was developed by Fishbein and Ajzen. This theory states that human intention is predicted by attitude and subjective norms (Fishbein & Ajzen, 1975). In the TPB, perceived behavioural control was added to expand the theory and describe people's perception of ease or difficulty about performing the behaviour (Ajzen, 1991). First, attitude describes an individual's belief towards a certain type of behaviour. It is the individual's perception of whether a particular behaviour or act has a positive or bad impact on his or her life (Fishbein & Ajzen, 1975). In this study people look at reviews and its

characteristics to build an opinion about a travel agency in order to see whether the agency is suitable for them or not. Second, the subjective norm focusses on everything that surrounds the individual such as its social network, cultural norms and group beliefs (Fishbein & Ajzen, 1975). Reviews can serve as a subjective norm for what other people think about a travel agency, which might affect a person's decision. Third, perceived behavioural control indicates how hard or easy it is for the individual to display a certain behaviour (Ajzen, 1991). These three constructs predict an individual's behavioural intention and in turn lead to displaying the behaviour. The stronger the perceived behavioural control and the more favourable the attitude and subjective norm, the greater the intention to undertake a given behaviour should be (Ajzen, 1991). In this research, it will be studied what influences people's purchase intention based on reviews. The reviews can be seen as elements that influence people's behavioural intentions. Therefore, the dependent variable "purchase intention" will be used in this study to test how fake negative reviews affect it. The application of this theory provides a better understanding of people's decision making process of making a purchase.

2.1.2. The Elaboration Likelihood Model

When consumers or companies post a fake review they sometimes do this with the intention of achieving a certain goal such as persuading other consumers to purchase a product without them having ever used the product before (Choi et al., 2016). However, reviews are there to help consumers in their decision-making process and the real opinion of other consumers about a product is therefore important (Gössling et al., 2016). Online reviews influence people's purchasing intentions and affect the sales volume of the company (Petrescu et al., 2018; Heydari et al., 2015). When a considerable amount of negative reviews are written about a product, this might increase the possibility that the product will not be purchased (Cui et al., 2012). This means that people are persuaded by the amount of reviews as well as the content of the review.

According to the Elaboration Likelihood Model (ELM) found that people might not extensively read the reviews (Petty & Cacioppo, 1986). There are two routes of persuasion that can be used in this model, depending on the extent of elaboration. People obtain and process information in a different way depending on the route they are going through. The "central route" describes the persuasion of people who are highly involved. In this route persuasion is achieved through deep examination of the information, arguments and facts contained in the message. In the "peripheral route" the persuasion process of people who are less involved is described. When people are less involved, weaker arguments, humour and cues can be used to

persuade them. They are more guided by the communicator and they have this image of the communicator being credible. Instead of engaging in extensive issue thinking, people taking the peripheral route are persuaded by weaker arguments (O’Keefe, 2013). This theory demonstrates that people can be persuaded based on their level of involvement. As a result, reviews may influence people's purchasing decisions in this study.

There is a clear distinction between consumers who are heavily involved in the spread of fake reviews and those who are not. As a result, when people are deeply invested and spend a lot of time thinking about the facts in the review, they may be more aware of how to detect fake reviews, making these people more difficult to persuade. On the other hand, consumers who are not as involved are more easily persuaded by a fake review. These customers may be unaware of the signals of a review containing incorrect information. Perceived realism is an important characteristic in the persuasion process (Hall, 2003). Perceived realism is conceptualized in the thoughts of audiences and the way they perceive a message and judge it as realistic. It includes five dimensions: plausibility, typicality, factuality, narrative consistency and perceptual quality (Cho, Shen and Wilson, 2012). These dimensions can help explain to what extent people perceive a review to be real.

2.1.3. Source Credibility Model

Negative reviews are experienced to have more of an impact than positive reviews when people decide whether to purchase something or not (Kusumasondjaja et al., 2012). Review sites often receive criticism since the reviews that are posted are not checked beforehand (Kusumasondjaja et al., 2012). The credibility of the review is therefore an important mediator in people’s decision making process. When travel agencies lose a part of their credibility, they might lose a number of clients. That is why it is important to define credibility. In this research the term “source credibility” is used, which refers to the believability of sources of information (Kouzes & Posner, 2011). Source credibility also refers to the Source Credibility Model that was developed in 1990 by Roobina Ohanian. This theory was developed to measure the perceived expertise, trustworthiness and attractiveness of celebrity endorsers (Ohanian, 1990). Expertise is the degree to which a communicator is regarded as a reliable source of information (Hocevar et al., 2017). Whereas trustworthiness is defined as the degree of confidence in the communicator's aim to communicate the most valid assertions (Hocevar et al., 2017). Attractiveness measures the visual attractiveness of the endorser, which in this case would be the visual attractiveness of the review (Hocevar et al., 2017).

Source credibility can be defined by these three components and therefore be used to measure the believability of the source. The credibility of the source who wrote the review in turn affects the purchase intention (Nowak & McGloin, 2014). In this case, the power lies with the receiver of the message, because this person determines the credibility of the message (Roberts, 2010). The purpose of this study is to see if the purchase intention of consumers increases when they believe reviews to be credible. Based on ELM this could be predicted by involvement. Therefore, the following sub-question is introduced:

SQ: What is the relationship between source credibility and involvement on purchase intention?

2.2. Characteristics of a review

Social media provides a platform for everyone to share their opinion, this complements the word of mouth communication about products or goods (Chen et al., 2011). When consumers perceive online reviews as fake, they feel as if they are being manipulated by companies or fellow consumers. This manipulation often tends to come in the form of a negative fake review, which negatively affects the attitude towards the quality of the service or product consumers are reviewing (Dellarocas, 2006). Therefore, this manipulation leads to a decrease in the quality of information, as well as a decrease in credibility of the reviews which in turn results in the review being less helpful (Zhao et al., 2013). Because of this decrease in credibility, consumers will become suspicious about the company where they wish to buy a product or service. This feeling of distrust leads to a lower purchase intention (Filieri, 2015). It is known that purchase intention directly affects the sales of a firm (Petrescu et al., 2018), but it is not known how specific characteristics of a review can have an effect on purchase intention.

2.2.1. Warning label

One of the characteristics that will be studied is the addition of a warning label to a review that is perceived as a fake negative review. Adding a warning label to a fake negative review could help to understand how consumers make certain decisions. In addition, it could make people think that a review is fake. Adding a warning label has been done before in fake news posts on the internet. Studies show that this reduces the possibility of people sharing these reviews with family and friends which stops the spread of misinformation (Dizikes, 2020). Visual warning labels, for example on cigarettes, appear to have an effect on the number of people who smoke (Hiilamo et al., 2019). The effectiveness of these warning labels is determined by the location of the warning label, as well as its form and content (Halim, 2019).

This study will test whether adding a warning label to a fake negative review leads to a difference in purchase intention. It is expected that purchase intention will increase, because adding a warning label to a fake review makes people feel more sure about their purchase. When potential consumers read a fake negative review that is marked with a warning label, it should lead to a higher purchase intention, as the consumer will not trust the negative review about that product or service. It is expected that this will align purchasing intention with attitude towards the product.

H1: Including a warning label to a fake negative review leads to a higher purchase intention than not including a warning label.

2.2.2. Writing style

Another characteristic that can determine whether people perceive a review as fake or not is the writing style of the review (Wu et al., 2020). When judging the reliability of a review, consumers often consider grammar and writing style (Ketron, 2017). The writing style is of importance when people decide whether a review is fake or real, therefore this characteristic is examined in this study. People see real reviews as reviews that are often written with correct grammar and spelling, and contain sufficient contextual reference and clear descriptions, whereas fake negative reviews often contain typographical errors that diminishes the writing style (Brown, 2020; Powell, 2020). Besides the grammar and spelling, the flow of the sentences is also important in improving the authenticity of reviews. Coherence in a review comes from using common pronouns, conjunctions and correct punctuation (Juuti et al., 2018). Obviously, people can make human mistakes such as typographical errors or common spelling mistakes. However, people distinguish fake reviews from real reviews by different features and mistakes. In addition, these mistakes are often repeated when it comes to a fake review (Juuti et al., 2018). The writing style of a review is therefore an important characteristic that people consider when they read reviews.

People think that fake reviews either lack detail or are unusually explicit about the scenario (Murphy, 2021). They contain many verbs, fewer nouns, and many typos, and fake reviewers constantly make these same mistakes in one review (Bekmanova, 2017). According to research people think that fake reviews are more likely to contain repeated phrases and therefore similar mistakes (Nadkarni, 2021). Previous studies show that the most common mistakes are the typos, grammar errors and the wrong punctuation (Ketron, 2017; Juuti et al., 2018). These mistakes in writing style makes people think that they are reading a fake review (Wu et al., 2020).

This study looks at reviews that contain errors or not and whether the purchase intention of a consumer with a review can differ based on the writing style and readability of the review. The readability of the review is an important factor for people to perceive a review as real (Hu et al., 2012). It is expected that many spelling mistakes in reviews make a review be perceived as fake by the consumers and therefore a review with no spelling errors will lead to lower purchase intention. The negative review is will be perceived as real and people will therefore base their purchase on this review:

H2: No spelling errors in a negative review leads to a lower purchase intention than when a review includes spelling errors.

2.2.3. Username

It is also important to look at the context that the review is written in. This can indicate whether a review is fake or not. When someone wants to post a review on a platform, they have to register and fill in a username (Choi et al., 2016). Genuine buyers of the product or service register this profile with their real name or with names that have a connection with their interests. For example, when people are animal lovers they might have an unusual username such as Simon_AnimalLover1234, which might appear to be fake. Having a large amount of numbers in a username might indicate that the user is a fraud who has no real experience with the product or service (Kashti & Prasad, 2019). People often experience usernames that are sarcastic, humoristic or include a lot of numbers often as fake (Powell, 2020), because it makes users come across as anonymous (Hawkins, 2018). Additionally, usernames that exist out of abbreviations are perceived as vague and therefore less credible (Forsey, 2019). Anyone can use a review platform and the reviewer might not have experienced the service of, in this case, a travel agency (Hawkins, 2018). Therefore, the same user may show up, using a new account, systematically writing fake reviews about different companies (Dragan, 2018). Therefore, profiles of reviews will come across as more genuine when they contain more personal information such as a profile picture, gender and age (Hu & Yang, 2020).

It is expected that, when people notice that a username looks weird or suspicious, they might realise it is a fake review. This means that consumers are expected to look at usernames in order to indicate whether the review is fake or real. The usernames that were examined in previous studies contained a lot of numbers (Powell, 2020) and have an abbreviation of the first and last name (Forsey, 2019). It is expected that a fake negative review written by a user with a genuine username will lead to a lower purchase intention. That is why the following hypothesis was developed:

H3: A more realistic username of a negative review leads to a lower purchase intention than a less realistic username.

2.3. Review credibility

When consumers read a review that is in line with their own beliefs and experiences it makes them perceive the review as credible (Chakraborty & Bhat 2018). Research by Chakraborty and Bhat (2018) shows that the quality of the content of the review and the source who writes the review have an effect on the perception of whether an online review is credible or not. Consumers often scrutinize the credibility of online reviews before they accept the review (Shan, 2016). However, often review sites in general are not perceived as credible because of their lack of control over who is posting the review and the content of the review (Kusumasondjaja et al., 2012). Credibility is the key factor in influencing people's purchase intention (Shan, 2016). The influence of credibility is expected to produce both positive and negative effects. There will be a negative effect of the variables on credibility, but a positive effect of credibility on purchase intention. It is expected that credibility mediates in the effect of the warning label, writing style, and username on purchase intention. When credibility increases, the purchase intention also increases. Therefore, the following three mediation hypotheses were developed:

H4a: The credibility of negative reviews mediates the influence of a warning label on purchase intention.

H4b: The credibility of negative reviews mediates the influence of the writing style on purchase intention.

H4c: The credibility of negative reviews mediates the influence of the realistic username on purchase intention.

2.4. Perceived realism of reviews

The perceived realism of review can be described as how much a certain story relates to a real-world experience (Hall, 2003). When the reviews lack realism, they might be experienced as fake reviews. In the study of Hall (2003), the perceived realism of media realism is being discussed. That previous study established that people perceive realism based on five constructs: "plausibility", "typicality", "factuality", "narrative consistency", and "perceptual quality". According to Hall (2003), plausibility refers to the likelihood that the events or behaviour described in the media may occur in real life. The second construct, typicality, refers to the type or range of persons in the story in the media that resembles a person that could be

the person who reads it. Third, the factuality describes whether the accurately represented a real-life situation. Narrative consistency refers to the consistency of the story that is told in the media. When it is a coherent story that does not contradict itself, it is seen as a realistic story that can happen in real-life. Lastly, the perceptual quality describes how audio, visuals and other manufactured elements of media influence the audience. When these constructs are all present, the story will be perceived as real by its readers. So when people think the story that has been told can happen in real life, they think the story is plausible and therefore they perceive it as real.

These five constructs can be applied to the perceived realism of reviews. For this study it is interesting to measure whether people perceive the reviews as real. Perceived realism will measure whether people perceive the story in the review as something that can happen in real life and as something that resembles a range of people. Perceiving a review as real or fake can have an influence on people's purchase intention. It is expected that perceived realism mediates with the three independent variables in the effect on purchase intention. Therefore, the following mediation hypotheses were developed:

H5a: The perceived realism of negative reviews mediates the influence of a warning label on purchase intention.

H5b: The perceived realism of negative reviews mediates the influence of the writing style on purchase intention.

H5c: The perceived realism of negative reviews mediates the influence of the username on purchase intention.

2.5. Relationships between review characteristics

In order to provide a greater representation of the variables, it is important to measure the interaction effect between the variables (Rahman, 2019). It is assumed that the presentation of the review is something people do not notice by themselves (Powell, 2020). It is possible that people will overlook grammatical problems in the review and not notice whether the username is sarcastic or whether it contains a lot of numbers. A warning label could function as a cue that makes people aware of a username that could be fake. In addition, a warning label can also make people aware of any typographical errors the review might have. This is when an interaction effect occurs. An interaction effect occurs when the effect of one of the variables depends on another variable (Frost, 2020). It occurs when the relationship between an independent variable and the dependent variable depends on a second independent variable, which makes the joint effect significantly bigger (Rahman, 2019). Adding a warning label could

function as a cue that makes people aware of a review being fake. This has led to the following interaction hypotheses:

H6: There is an interaction between the warning label and the writing style in that when a warning label is included, the negative effect of the writing style on purchase intention is reduced compared to when it is not.

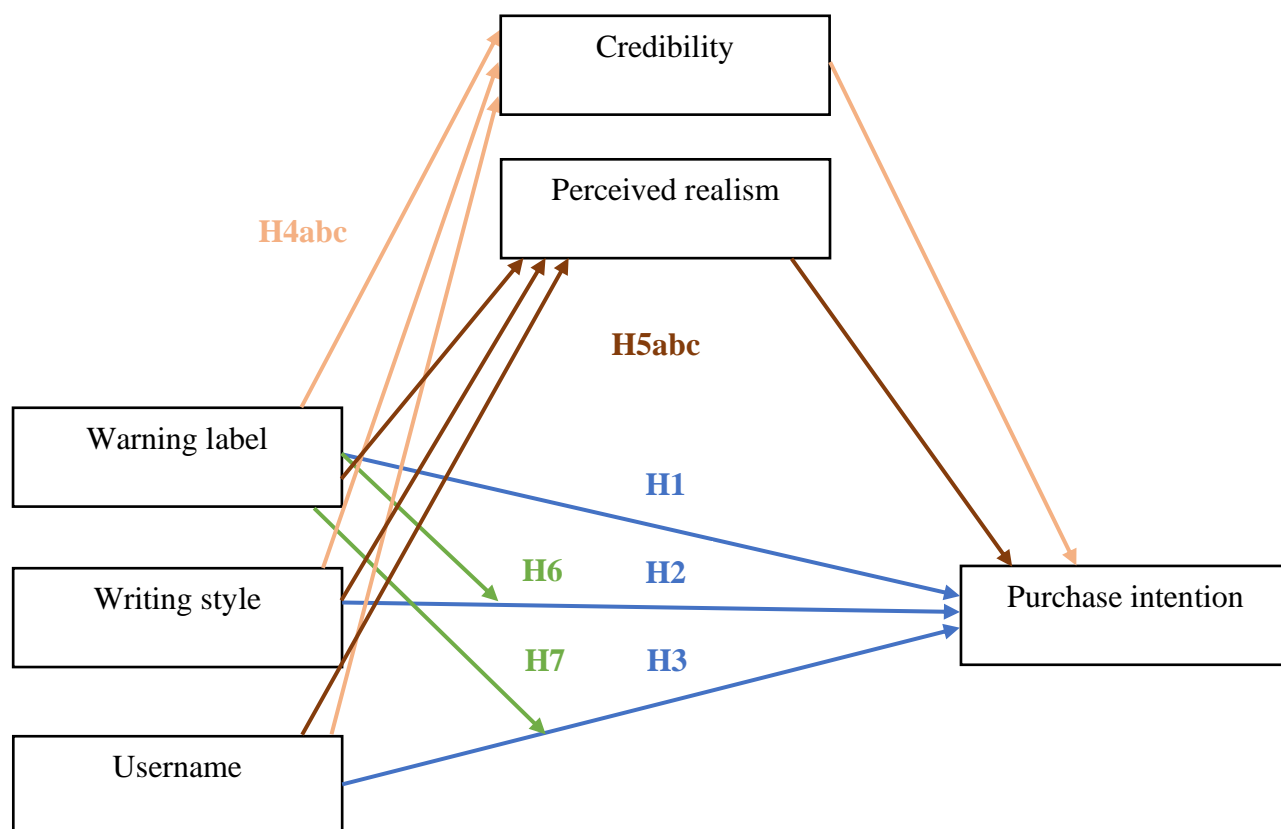
H7: There is an interaction between the warning label and the username in that when a warning label is included, the negative effect of the username on purchase intention is reduced compared to when it is not.

2.6. The conceptual model

The conceptual model below (Figure 2.1) was developed to show the expected effect of the independent variables: the warning label, writing style and the username. It is expected that the warning label has a positive effect on people's purchase intention as a warning label indicates whether a negative review is fake. This leads to the consumer not trusting that specific negative review. Therefore, the consumer might believe other, more positive, reviews which might lead to a higher purchase intention. However, it is expected that high quality of writing of a negative review will lead to a lower purchase intention. When the review is written in high quality, the consumer tends to believe this negative review that is written about the product or service. Lastly, it is expected that a genuine username has the same effect as quality of writing. When a username of someone writing a negative review appears to be genuine, it will have a negative effect on the purchase intention.

Adding the variable credibility to the model with the three independent variables is expected to mediate in the effect on purchase intention. This means that the warning label, no spelling errors and a genuine username will have an effect on the credibility and the purchase intention.

Lastly, it is expected that the variables might interact with each other. People do not always notice the quality of writing or the username, therefore, adding a warning label is expected to make consumers aware of the fact that they are reading a fake review and make them aware of any typographical errors or possible fake usernames. The interaction of the variables is therefore expected to lead to a higher purchase intention, as this results in the consumers not basing their purchase on the negative review.

Figure 2.1.*Conceptual model*

3. Method

This section illustrates why and how an experiment was used for examining the effect of a warning label and credibility issues on people's purchase intention in Dutch society. It discusses how the theoretical framework was operationalized by using an online experiment and explains which scales were used to measure purchase intention, credibility, realism and involvement.

3.1. Design

The purpose of this study is to see whether different review characteristics have a direct impact on people's purchase intention, and if there is a mediation or interaction effect between the variables. In this study three independent variables; *warning label*, *writing style* and *username* were manipulated. There was conducted a 2 (warning label: present or absent) x 2 (writing styles: spelling errors or no spelling errors) x 2 (username: fake or real) experiment

between subjects in order to test the hypotheses. This has led to the following conditions (see Table 3.1).

Table 3.1

Research conditions and number of participants

	No spelling errors		Spelling errors		Total
	Real	Fake	Real	Fake	
	username	username	username	username	
Warning label	31	38	39	33	141
No warning label	36	33	38	29	136
Total	67	71	77	62	277

3.2. Sample

A total of 277 people took part in this study and were randomly assigned to the eight conditions, ensuring that each condition included at least thirty people. The experiment was conducted with Dutch participants that were 18 years and older. Social media sites such as Instagram, Facebook, and LinkedIn were used to contact the respondents. Furthermore, snowball sampling was employed to recruit participants in order to obtain the necessary sample size for this study. The respondents ranged in age from 18 to 82 years old, with 64.4% being female, 35.4% being male and 0.4% of the respondents rejected to reveal their gender. The average age of participants is $M = 35.68$ ($SD = 15.71$) with a minimum age of 16 years and the maximum age of 80 years. A bachelor's degree or higher was held by more than 62.1% of the respondents. A total of 61.4% of the 277 respondents were familiar with Trustpilot, and 69.4% indicate that they (very) often read internet reviews.

3.3. Stimuli

3.3.1. Pre-test

In order to determine pre-existing subject knowledge a pre-test was used to see which aspects of the review the respondents pay attention to. The purpose of this test was to generate input from stimulus material (i.e., design of the reviews) of the experiment. In this pre-test, different review options were provided to see how people reacted to the manipulations. In order

to aid in the optimization of the main study, the pre-test examined the reactions of 10 people to the three variables: warning label, writing style and username.

The real Trustpilot website consists of multiple pages where you can read reviews about several companies. A company has its own page that shows the general star-rating which is generated by combining the rating of all the reviews that are posted about the company. In addition, the page shows individual reviews with the name of the user and their personal star-rating. The fundamental parts of this page were used in the pre-test to create the feeling as if the participants are really reading a review on Trustpilot.

First, the design and the location of the warning label was tested. The participants were given a selection of warning label styles to observe. The design of these warning labels were based on existing warning labels, that for example are used on Twitter. On Twitter they use an exclamation point with blue font style. This warning label was recreated in red to fit with the Trustpilot design. This adjustment resulted in different designs with a red or white background and various exclamation points. The participants were then asked which warning label they found the most clear and visible. They expressed their preference towards the warning label with the big red background, with text in white font style and a triangle exclamation point. Because of the red background, the warning label was noticeable and the text was readable. The warning label said: “Warning: According to our systems this review might include misinformation”. People showed in the pre-test that they would like more information when they read the warning label. That is why the sentence “Click here for more information” was added. Lastly, the location of the warning label was adjusted during the pre-test to see which area proved to be most suitable. The label was placed next to the username and next to the individual star-rating. The participants favoured the location next to the username. Here, the warning label appeared to be more readable and obvious.

Second, the content of the review had to be tested. Various stimulus material was provided to the respondents in the pre-test to modify the writing style of the review. Two things were important: the topic of the review and the way it is written. In order to pick the topic of the review, respondents were asked which types of unfavourable stories about a travel agency might discourage them from booking a trip. The participants mentioned multiple topics such as communication issues and problems with the payment. Multiple participants noticed that they do like it when the review is detailed and elaborated. Therefore, it was decided to make a review of around 200 words that described a bad experience with the company not getting in touch with them and not receiving a refund. In addition, based on the existing literature a review with bad writing style was developed. The review included grammar mistakes and typographical

errors that were repeated multiple times in the text. The amount of mistakes was tested in the pre-test. Three different texts were developed with the same topic, but with a different amount of mistakes. The participants were asked which review they would not trust. The 10 participants unanimously answered that the two reviews with the most errors were the least trustworthy for them. Therefore, the review about the travel agency that was developed for the main study contains a considerable amount of errors and talked about a travel agency that did not get in contact with their clients and did not provide a refund.

Third, the username was examined in the pre-test. Multiple fake usernames were shown to the participants to test which username they would perceive as fake. Afterwards, the participants had to choose which username they trusted the least and which one the most. According to the literature, people think usernames are fake when they include a lot of numbers and are abbreviations. Therefore, there was developed a list with usernames that included names that were fully written and did not contain numbers, but also included names with abbreviations and many numbers. Sop.Maas324, Victor Janssen, Ellenpeters, and Vic.Jan3727726J are some examples of usernames that were shown in the test. The names Victor Janssen and Ellenpeters were seen as the most trustworthy. Sop.Maas324 and Vic.Jan3727726J were seen as the least trustworthy. In addition, some participants mentioned that the name Vic.Jan3727726J stood out to them particularly, because of the big amount of numbers. Therefore, it was decided to use two similar names, with the same gender, for the real and fake review. Victor Janssen was added to the real review and Vic.Jan3727726J was added to the fake review.

3.3.2. Main study


Taking the outcome of the pre-test in account, the main study included eight different mock-up websites. The mock-up website consisted of the warning label, the text and username that came as a result from the pre-test. The participants were required to rank the items on a 5-point scale from totally disagree (1) to totally agree (5) after being exposed to one of the different screenshots of a mock-up website of Trustpilot with a review about fictional travel agency NOVITASOL. The mock-up reviews consisted of an identical replica of the website Trustpilot where a review with one of the eight conditions is shown. The mock-up showed the travel agency, the total number of reviews, and one specific review with username, content and a star-ranking. Depending on the condition, a warning label was added to the review. This led to eight different conditions based on the warning label, writing style and the username. The mock-up site for the experiment was developed using Adobe Photoshop. Figure 3.1 shows an example of the mock-up website with the warning label attached. The fake reviews used in this

experiment are created based on findings in existing literature. Therefore, the manipulation of these variables is theoretically supported. In the experiment all the reviews that are manipulated are negative towards the chosen travel agency. The results of the pre-test were also used to produce reviews for the main study (see Figure 3.2). Appendix A shows all the other six conditions with different characteristics and its translation.

Figure 3.1


Negative review with a warning label, spelling errors, and a fake username

Reizen en vakantie > Activiteiten en tours > Reisbureau




NOVITASOL Nederland

Reviews 2.475 • Goed



3,8 ⓘ

Schrijf een review




Reviews 2.475

Filter op: **Waardering** **Nederlands** ⓘ


<input type="checkbox"/> Uitstekend	<div></div>	49%
<input type="checkbox"/> Goed	<div></div>	33%
<input type="checkbox"/> Gemiddeld	<div></div>	7%
<input type="checkbox"/> Slecht	<div></div>	2%
<input type="checkbox"/> Zeer slecht	<div></div>	9%

Zoek in reviews




Vic.Jan3727726J

2 reviews



Pas op! Volgens onze systemen is deze recensie mogelijk nep. [Klik hier voor meer informatie.](#)



Een dag geleden

Deze zomerr hebben wij voor het eerste een reis geboekt bij NovitaSol....

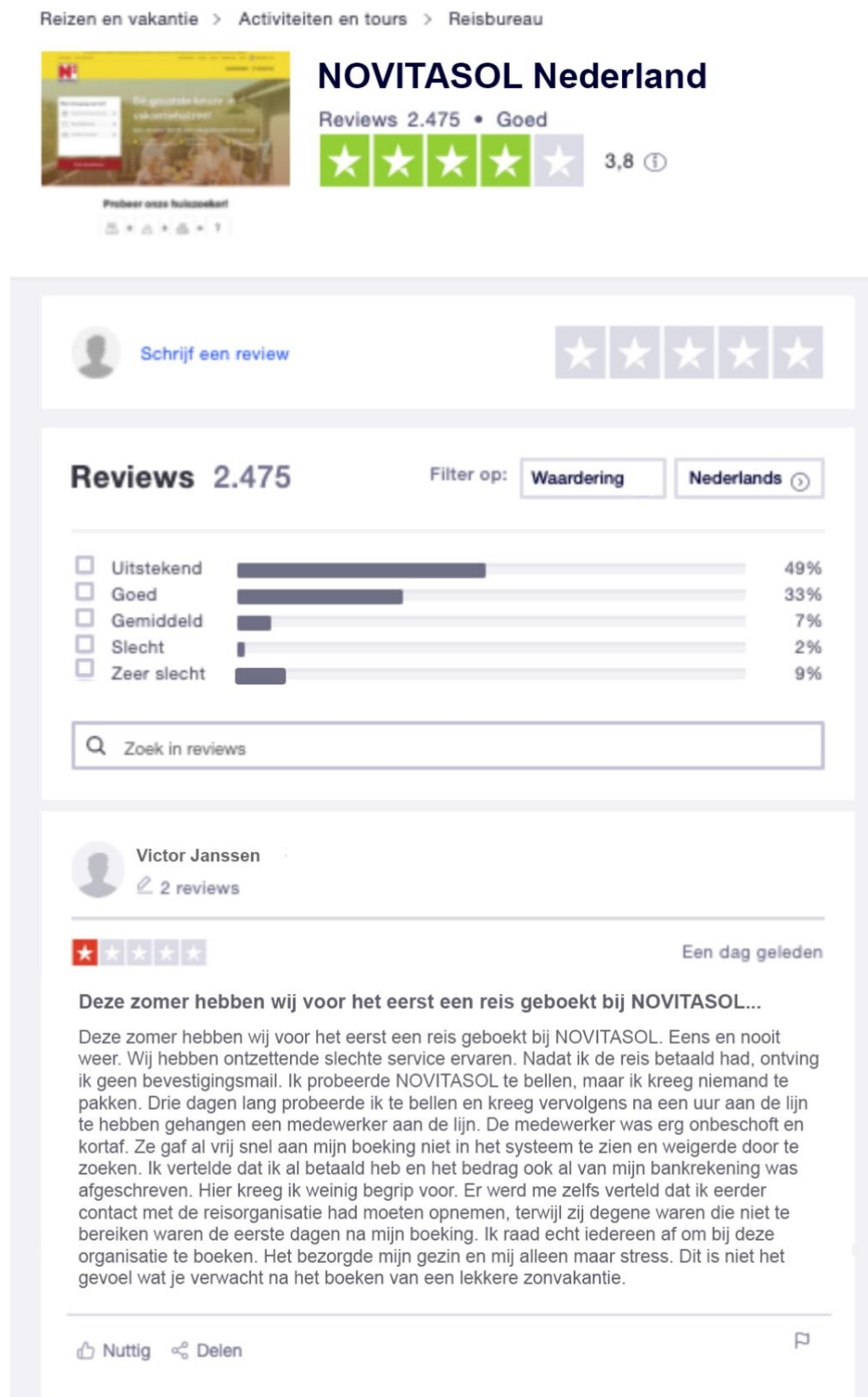
Deze zomerr hebben wij voor het eerste een reis geboekt bij NovitaSol. Eens en nooitweer. Wij hebben ontzettende slechte service ervaart. Nadat ik de reis betaald had ontving ik geen bevestigingsmail Ik probeerde Novitasol te bellen, maar ik kreeg niemand te pakken. 3 dagen lang probeerde te bellen kreeg vervolgens na een uur aan de lijn te hebben gehangen een medewerker aandelijn. De medewerekr was erg onebescdoft en kortaf ze gaf al vrij snel an mijnm boeking niet in het systeem te zienen werigerde door te zoeken. Ik vertelde dat ik al wel betaald had en het geld ook al van de rekening was afgeschreven hier kreeg ik weinig besgirp voor. Er werd me zelfs vertelt dat ik eerder contact met de reisorganisatie had moeten opnemen terwijl zei degenen waren die niet te bereiken waren de eerste dagen na mijn boeking. Ik raad echt iedereen af om bij deze organisatie te boeken hett bezorgde mij en mijn gezin alleen maar stresss. Dit is niet het gevoel wat je verwacht na het boekengre van een lekkere zonnennvaktie.

Nuttig Delen

🚩

Figure 3.2

Negative review without a warning label, without spelling errors, and a real username



3.4 Procedure

The eight conditions of this study were examined in an online experiment using Qualtrics, a platform for conducting web-surveys. The relevance and goal of the study were explained to the participants before they participated in the experiment. In addition, they were requested to consent to participating in the study. When starting the experiment, they were first instructed to simulate a typical situation in which they are looking to book a trip in the absence of a pandemic.

Participants were required to fill in demographic questions about gender, age, location and education (see Appendix B). Before starting the experiment, a short description of Trustpilot was given after which the respondents were randomly assigned to one of the eight conditions. Every respondent was required to look at least three seconds at the review before they could continue to the rest of the experiment. The participants were then asked to fill in the items (see Appendix B) based on a 5-point Likert Scale ranging from 1 (Strongly disagree) till 5 (Strongly agree) regarding the review they had just seen. The participants were initially exposed to items about purchase intention, followed by source credibility, perceived realism and consumer involvement. The online experiment came to a close with an acknowledgement and the option to submit any comments or questions to the researcher. In case participants had any further questions or complaints about the study, the researcher's email address was shown at the end of the experiment.

3.5 Measures

This section shows an overview of the measurements that were used in this study. The online experiment was developed to measure the effect of the independent variables on the dependent variable. Credibility, purchase intention, perceived realism and consumer involvement are all measured with existing scales that have proven their reliability and validity in previous studies. In the following sections the scales will be further explained.

3.5.1. Purchase intention

Purchase intention was measured by using and adjusting four items from Dodds, Monroe and Grewal (1991). The measured items were as followed: “Based on this review I am considering booking a trip at NOVITASOL”, “Based on this review I intend to spend money on a trip at NOVITASOL”, “Based on this review I want to buy tickets for a trip at

NOVITASOL” and “Based on this review I look forward to going on a trip from NOVITASOL” (see Appendix B). The items measured the willingness to purchase and have shown to be suitable for measuring purchase intention (Dodds et al., 1991). The participants were asked to rank the items on a 5-point Likert scale from totally disagree (1) to totally agree (5).

3.5.2. Source credibility

In order to measure credibility Ohanian’s (1990) 15 item source-credibility scale was adopted. This scale is used to measure the potential suitability of celebrities for endorsing specific products, but in this study it covered the specifications of a review (Kennedy, 2003). The scale covers the three key-dimensions “expertise”, “trustworthiness” and “attractiveness”. The source-credibility scale measures 15 attributes that covers the credibility of online reviews. On this scale the participants were asked to answer the item “I perceive the displayed online review about NOVITASOL” (see Appendix B). Because the scales measure different behaviour, they were employed individually.

3.5.3 Perceived realism

A realism scale was used to see how it affects purchase intention. Hall, (2003) divided perceived realism into five subjects: “plausibility”, “typicality”, “factuality”, “narrative consistency”, and “perceptual quality”. The scale was used in previous studies and proved to be reliable and valid (Green, 2004). The perceptual quality items were removed from the scale because they focused on audio and visual characteristics and therefore did not focus on aspects that are important in this study. The rest of the items were as follows: “The review describes an experience that could potentially happen in real life” “The experience in the review describes possible real life situations” “It is unlikely that it actually turned out the way it is described in this review” etc. (see Appendix B). The measures were given on a 5-point Likert scale ranging from totally disagree (1) to totally agree (5).

3.5.4 Involvement

Consumer involvement is a key factor in explaining consumer behaviour and attaches inherent personal elements to an individual object (Zaichkowsky, 2012). Therefore, the relationship of involvement and source credibility will be examined. Zaichkowsky (2012) used neuroscientific methods to better understand consumer involvement and created a psychometric scale. This scale measures the unconscious response of consumers. Involvement is related to

the characteristics and presentation of the source and the emotional state that a person experiences (Schuitema et al., 2020). In this study it can help to explain consumers' involvement to see how consumers perceive fake reviews. With the 10-item scale of Zaichkowsky (2012) the respondents were required to answer the following item (see Appendix B): "The review that I saw on Trustpilot about NOVITASOL was...". The final measurement instrument can be found in Appendix C.

3.5.5 Construct Validity and Reliability

In order to measure the validity of the constructs a factor analysis was performed. With a Kaiser-Meyer-Olkin (KMO) value of .912 all the measurements appeared to have strong validity. The eight constructs that were produced are shown in the factor analysis (see Appendix D). The analysis began with a nine-component approach. The factor analysis, on the other hand, revealed that the constructs "plausibility" and "typicality" scale loaded highly on the same factor. As a result, the number of components was reduced from nine to eight.

To test the reliability of the four scales, a reliability test was conducted. Based on the factor analysis, source credibility was divided into 3 measures: Attractiveness, trustworthiness, and expertise. Perceived realism was also divided in 3 measures: Plausibility and typicality, factuality, and narrative consistency. Table 3.3 shows that all scales were above Cronbach's alpha .70 and were therefore tested reliable.

Table 3.3

Cronbach's alpha

Construct	Cronbach's Alpha	N
Purchase intention	.94	4
Attractiveness	.89	5
Trustworthiness	.78	5
Expertise	.92	5
Plausibility and Typicality	.77	7
Factuality	.88	3
Narrative Consistency	.85	3
Involvement	.94	10

4. Results

In the following section the demographic results will be explained by using descriptive statistics, meaning that the means (M) and standard deviations (SD) were examined. In addition, this section will elaborate on the tests of the main effects, mediation effects and the interaction effects that were developed in the hypotheses. An additional analysis will further explain these results. Lastly, the manipulation check will be explained and discussed.

Table 4.1 shows a summary of the descriptive findings on the variables purchase intention, source credibility, perceived realism and involvement. The table shows that purchase intention has the lowest mean of this study with a value of 2.45, while perceived realism has the highest mean with a value of 3.19.

Table 4.1

Descriptive statistics

Construct	N	M*	SD
Purchase Intention	276	2.45	0.85
Attractiveness	277	2.06	0.77
Trustworthiness	277	2.96	0.76
Expertise	277	2.53	0.89
Plausibility and Typicality	276	3.33	0.56
Factuality	277	3.09	0.72
Narrative Consistency	277	2.97	0.81
Involvement	277	2.88	0.87

*All scales are measured on a 5-point Likert scale (1=totally disagree / 5=totally agree)

4.1. Main effects

H1, H2 and H3 assume that the independent variables (warning label, writing style, and username) have an effect on the dependent variable (purchase intention). Therefore, the main effects were all measured by an univariate analysis of variance (ANOVA) with the warning label, writing style and the username as factors and the purchase intention as the dependent variable. H1 assumed that adding a warning label to a negative review would lead to a higher purchase intention. In the experiment there were two options regarding warning labels; no warning label and a warning label. The test showed no significant effect of the addition of a warning label on purchase intention ($F(1, 276) = 0.132, p = .717$). Therefore, H1 is rejected, meaning that the addition of a warning label does not increase people's purchase intention.

H2 assumes that no spelling errors in a fake negative review will lead to a lower purchase intention than a review with spelling. The writing style consisted of two options in the experiment: spelling errors and no spelling errors. The ANOVA analysis revealed that no spelling errors in a fake negative review had no significant effect on purchase intention ($F(1, 276) = 2.711, p = .101$), indicating that H2 is rejected. This means that a review without spelling errors does not lead to a decrease in people's purchase intention.

H3 expected that the usage of a realistic username when writing an online negative review would lead to a lower purchase intention compared to when an unrealistic username is used. In this experiment there were two options regarding the username: fake username and real username. The same univariate analysis showed no significant effect of the username on the purchase intention ($F(1, 276) = 0.768, p = .382$). As a result, H3 is rejected, indicating that a review written by a person with a realistic username does not lead to a reduction in purchase intention.

4.2. Source credibility as mediator

In H4a, H4b and H4c the variable “credibility” was added and combined with the warning label, writing style and the username to test the mediation effect this variable might have on the purchase intention. The source-credibility scale uses 15 items that covers measuring the credibility of online reviews. It covers the three key-dimensions “trustworthiness”, “attractiveness”, and “expertise”. To investigate H4abc the dimensions were all measured by using David A. Kenny's mediation analysis, measuring multiple effects through linear regression (Kenny, 2021). Four effects were measured as a result of this analysis. The total effect is a measurement of the independent variable's effect on the dependent variable. The direct effect measures the mediator's mediation impact. Then, the effect of the independent variable on the mediating variable is measured and the effect of the mediator variable on the dependent variable. These effects will be discussed in the following sections.

The linear regression did not show a total effect, nor a mediation effect of the three independent variables (warning label, writing style, username) and the three dimensions of credibility (attractiveness, trustworthiness, expertise) on purchase intention as will be further discussed in more detail. This means that H4a, H4b and H4c are rejected. The total and direct effect will be further discussed per construct of source credibility in the following sections. In addition, the effect of the independent variables on the mediator and the effect of the mediator on the dependent variable will be discussed.

4.2.1. Attractiveness

There was no total effect found of the warning label ($R^2 < .001$, $F(1, 274) = 0.121$, $p = .728$), writing style ($R^2 = .009$, $F(1, 274) = 2.362$, $p = .125$), and username ($R^2 = .002$, $F(1, 274) = -0.686$, $p = .408$) on purchase intention (see Table 4.2). Additionally, the constructs of source credibility were tested as mediating variables between the independent variables and the dependent variable. First, the attractiveness of the review was tested as a mediator. There appeared to be no mediation effect between the warning label ($R^2 = .011$, $F(2, 273) = 1.52$, $p = .632$), or username ($R^2 = .012$, $F(2, 273) = 1.70$, $p = .444$) and attractiveness on purchase intention. However, the test showed that writing style and attractiveness of the review have an effect on the purchase intention ($R^2 = .023$, $F(2, 273) = 3.25$, $p = .057$, $\beta = -.12$). The test showed a marginally significant effect based on $.100 > p > .050$. In other words, attractiveness mediates the effect of writing style on purchase intention. Attractiveness mediates in the effect of writing style on purchase intention in that when the review includes spelling errors, the purchase intention decreases.

Table 4.2

Attractiveness as Mediating Variable on Purchase Intention

	Warning label	Writing style	Username
Total effect	$\beta = -.02$, $p = .728$	$\beta = -.09$, $p = .125$	$\beta = -.05$, $p = .408$
Direct effect	$\beta = -.03$, $p = .632$	$\beta = -.12$, $p = .057$	$\beta = -.05$, $p = .444$

For the effect of the independent variables on attractiveness, the following has been observed. No effect was found of the warning label ($R^2 = .005$, $F(1, 275) = 1.363$, $p = .244$), or username ($R^2 = .001$, $F(1, 275) = 0.282$, $p = .596$) on the mediating variable attractiveness. However, when looking at the connection between writing style and attractiveness, it becomes clear that writing style does have an influence on attractiveness ($R^2 = .035$, $F(1, 275) = 10.10$, $p = .002$, $\beta = .19$). Meaning, that writing style has an effect on people's perception of the attractiveness of the review. The test showed that the better the writing style, the more the readers experience the review as attractive.

In addition, the mediating variable attractiveness did show a marginally significant effect on the dependent variable ($R^2 = .010$, $F(1, 274) = 2.81$, $p = .095$, $\beta = .12$). Nevertheless, this is a marginally significant effect based on $.100 > p > .050$. Meaning, that the attractiveness of a review does show a small effect on people's purchase intention in this study in that the higher the attractiveness of the review, the lower the purchase intention of the consumers will be.

4.2.2. Trustworthiness

Trustworthiness is the second dimension of credibility that was used as a mediator between the three independent variables and purchase intention. Trustworthiness measures the degree of confidence the participants have in the reviewer's aim to communicate the most accurate information. Table 4.2 shows the results of the test and shows that no mediation effect of the warning label ($R^2 = .056$, $F(2, 273) = 8.13$, $p = .535$), writing style ($R^2 = .060$, $F(2, 273) = 8.64$, $p = .245$), username ($R^2 = .058$, $F(2, 273) = 8.37$, $p = .360$) and trustworthiness on purchase intention was found.

Table 4.3

Trustworthiness as Mediating Variable on Purchase Intention

	Warning label	Writing style	Username
Total effect	$\beta = -.02$, $p = .728$	$\beta = -.09$, $p = .125$	$\beta = -.05$, $p = .408$
Direct effect	$\beta = .04$, $p = .535$	$\beta = -.07$, $p = .245$	$\beta = -.05$, $p = .360$

In addition, the effect of the independent variables on trustworthiness was investigated. There was no effect of the username ($R^2 = .000$, $F(1, 275) = 0.056$, $p = .813$) on trustworthiness. Nevertheless, there was found a marginally significant effect of writing style on trustworthiness ($R^2 = .010$, $F(1, 275) = 2.884$, $p = .091$, $\beta = .10$) based on $.100 > p > .050$. This means that when the review does not have spelling errors the trustworthiness of the review increases. There was also found a significant effect of the warning label on trustworthiness ($R^2 = .057$, $F(1, 275) = 16.61$, $p < .001$, $\beta = .24$). Meaning, that no warning label leads to an increase of trustworthiness.

The effect of trustworthiness on purchase intention was also investigated. The test showed a significant effect of trustworthiness on purchase intention ($R^2 = .055$, $F(1, 274) = 3.25$, $p < .001$, $\beta = -.23$). Meaning, that the trustworthiness does affect people's purchase intention, but does not mediate in the effect of the warning label, writing style, or username on purchase intention. Based on this outcome we can say that an increase of trustworthiness of these fake negative reviews, will lead to a decrease of purchase intention.

4.2.3. Expertise

The third dimension measured the effect of the independent variables and expertise of the communicator as a reliable source of information of the review on purchase intention. There was no mediation effect between the warning label ($R^2 = .031$, $F(2, 273) = 4.38$, $p = .808$),

writing style ($R^2 = .032$, $F(2, 273) = 4.55$, $p = .513$), username ($R^2 = .033$, $F(2, 273) = 4.60$, $p = .468$) and expertise on purchase intention (see Table 4.4).

Table 4.4

Expertise as Mediating Variable on Purchase Intention

	Warning label	Writing style	Username
Total effect	$\beta = -.02$, $p = .728$	$\beta = -.09$, $p = .125$	$\beta = -.05$, $p = .408$
Direct effect	$\beta = .02$, $p = .808$	$\beta = -.04$, $p = .513$	$\beta = -.73$, $p = .468$

Additionally, the effect of the independent variables on expertise were tested. No effect was found of username on expertise ($R^2 = .002$, $F(1, 275) = 0.481$, $p = .489$). However, the linear regression showed a significant effect of the warning label ($R^2 = .039$, $F(1, 275) = 11.09$, $p < .001$, $\beta = .20$), and writing style ($R^2 = .039$, $F(1, 275) = 11.09$, $p < .001$, $\beta = .31$), on expertise. This means that the warning label and writing style, as separate variables, influence the expertise of credibility. When there is a warning label added the expertise of the review is higher. In addition, when the review has not got many spelling errors, the expertise is higher.

The effect of expertise on purchase intention was also investigated. Tests show a significant effect of expertise on purchase intention ($R^2 = .031$, $F(1, 274) = 8.68$, $p = .003$, $\beta = -.18$). This means that expertise does affect purchase intention, but does not mediate in the effect of the independent variables on purchase intention. The linear regression shows that the higher the expertise of the review, the lower the purchase intention.

4.3. Perceived realism as mediator

The variable perceived realism was introduced to combine with the warning label, writing style, and username to see if this variable had a mediation effect on purchase intention. This assumed mediation effect was developed into H5a, H5b, and H5c. The perceived realism scale was divided in three dimensions into this study: plausibility and typicality, factuality, and narrative consistency. The factor analysis showed that the variables plausibility and typicality measured the same construct. Therefore, these two variables were treated as one in the following tests. David A. Kenny's mediation approach, which measures multiple effects through linear regression, was used to measure all of the dimensions (Kenny, 2021). The three independent variables (warning label, writing style, username) and the three dimensions of perceived realism (plausibility and typicality, factuality, narrative consistency) did not show a total effect or a mediation effect on purchase intention in the linear regression. This means that

H5a, H5b and H5c are rejected. However, the tests did show other effects which will be further discussed in the following sections. First, for every construct the total and direct effect will be discussed, followed by the effect of the independent variables on the mediator and the effect of the mediator on the dependent variable.

4.3.1. *Plausibility and Typicality*

Table 4.5 shows that there was no total effect found of the warning label ($R^2 < .001$, $F(1, 274) = 0.121$, $p = .728$), writing style ($R^2 = .009$, $F(1, 274) = 2.362$, $p = .125$), and username ($R^2 = .002$, $F(1, 274) = -0.686$, $p = .408$) on purchase intention. Additionally, the constructs plausibility and typicality were tested as a mediating effect on purchase intention. Plausibility and typicality measure whether a situation that is written in the review can happen in real-life and whether the person in the story resembles a real person. It was expected that these variables would mediate in the effect of the independent variables on purchase intention. However, the test showed no direct effect of the warning label ($R^2 = .107$, $F(2, 272) = 16.318$, $p = .791$), writing style ($R^2 = .112$, $F(2, 272) = 17.235$, $p = .192$), and username ($R^2 = .108$, $F(2, 272) = 16.465$, $p = .564$), with plausibility and typicality on purchase intention (see Table 4.5). This means that the fact whether the story can happen in real life to a real person does not have an effect on purchase intention.

Table 4.5

Plausibility and Typicality as Mediating Variables on Purchase Intention

	Warning label	Writing style	Username
Total effect	$\beta = -.02$, $p = .728$	$\beta = -.09$, $p = .125$	$\beta = -.05$, $p = .408$
Direct effect	$\beta = .02$, $p = .791$	$\beta = -.08$, $p = .192$	$\beta = -.03$, $p = .564$

In addition, the effect of the independent variables on plausibility and typicality were measured. Writing style ($R^2 = .003$, $F(1, 274) = 0.729$, $p = .394$), and username ($R^2 = .002$, $F(1, 274) = 0.540$, $p = .463$), did not show a significant effect on plausibility and typicality. However, the warning label showed a marginally significant effect on plausibility and typicality based on $.100 > p > .050$ ($R^2 = .011$, $F(1, 274) = 3.149$, $p = .077$, $\beta = .12$). This means that no warning label leads to higher perception of plausibility and typicality.

The effect of plausibility and typicality on purchase intention was also tested and showed to have a significant effect ($R^2 = .107$, $F(1, 273) = 32.676$, $p < .001$, $\beta = -.33$). This means that the higher the perception of plausibility and typicality of fake reviews, the lower the purchase intention is.

4.3.2. *Factuality*

The second construct that was tested as a mediating variable between the independent variables and the dependent variable was the factuality. Factuality describes the accurately with which a real-life situation is represented. The linear regression showed no direct effect of the warning label ($R^2 = .074$, $F(2, 273) = 10.907$, $p = .447$), writing style ($R^2 = .077$, $F(2, 273) = 11.342$, $p = .240$), and username ($R^2 = .075$, $F(2, 273) = 11.104$, $p = .331$), with factuality on purchase intention (see Table 4.6). Therefore, the accurately with which a real-life situation is represented did not mediate between the independent variables on purchase intention.

Table 4.6

Factuality as Mediating Variable on Purchase Intention

	Warning label	Writing style	Username
Total effect	$\beta = -.02$, $p = .728$	$\beta = -.09$, $p = .125$	$\beta = -.05$, $p = .408$
Direct effect	$\beta = .05$, $p = .447$	$\beta = -.07$, $p = .240$	$\beta = -.06$, $p = .331$

The effect of the independent variables on factuality was investigated. Writing style ($R^2 = .008$, $F(1, 275) = 2.270$, $p = .133$), or username ($R^2 = .001$, $F(1, 275) = 0.173$, $p = .678$) did not have an effect of the factuality. Nevertheless, the warning label showed a significant effect on factuality ($R^2 = .057$, $F(1, 275) = 16.665$, $p < .001$, $\beta = .24$). Meaning that when no warning label is added, the perception of factuality becomes higher.

Additionally, the effect of factuality on purchase intention was tested and showed a significant effect ($R^2 = .072$, $F(1, 274) = 21.265$, $p < .001$, $\beta = -.27$). This means that an increase in factuality will lead to a decrease of purchase intention.

4.3.3. *Narrative Consistency*

Third, the construct narrative consistency was tested as a mediating variable on purchase intention. Narrative consistency describes whether the story that is told in the review is consistent and coherent and does not contradict itself. This study did not show a direct effect of the variables warning label ($R^2 = .095$, $F(2, 273) = 14.392$, $p = .910$), writing style ($R^2 = .031$, $F(1, 274) = 8.68$, $p = .003$), and username ($R^2 = .096$, $F(2, 273) = 14.431$, $p = .774$), with narrative consistency on purchase intention (see Table 4.7). Meaning, that the consistency of the story in the review did not show an effect on people's purchase intention.

Table 4.7

Narrative Consistency as Mediating Variable on Purchase Intention

	Warning label	Writing style	Username
Total effect	$\beta = -.02, p = .728$	$\beta = -.09, p = .125$	$\beta = -.05, p = .408$
Direct effect	$\beta = -.01, p = .910$	$\beta = -.02, p = .774$	$\beta = -.06, p = .277$

In addition, the effect of the independent variables on narrative consistency were tested. The warning label ($R^2 = .008, F(1, 275) = 2.192, p = .140$), and username ($R^2 = .002, F(1, 275) = 0.452, p = .502$) did not show an effect on narrative consistency. However, a significant effect of writing style on narrative consistency was found ($R^2 = .122, F(1, 275) = 38.130, p < .001, \beta = .35$). This means that a review with no spelling errors leads to a higher perception of narrative consistency.

Narrative consistency also showed to have a significant effect on purchase intention ($R^2 = .095, F(1, 274) = 28.875, p < .001, \beta = -.31$). Meaning that the higher the narrative consistency of the review, the lower the purchase intention will be.

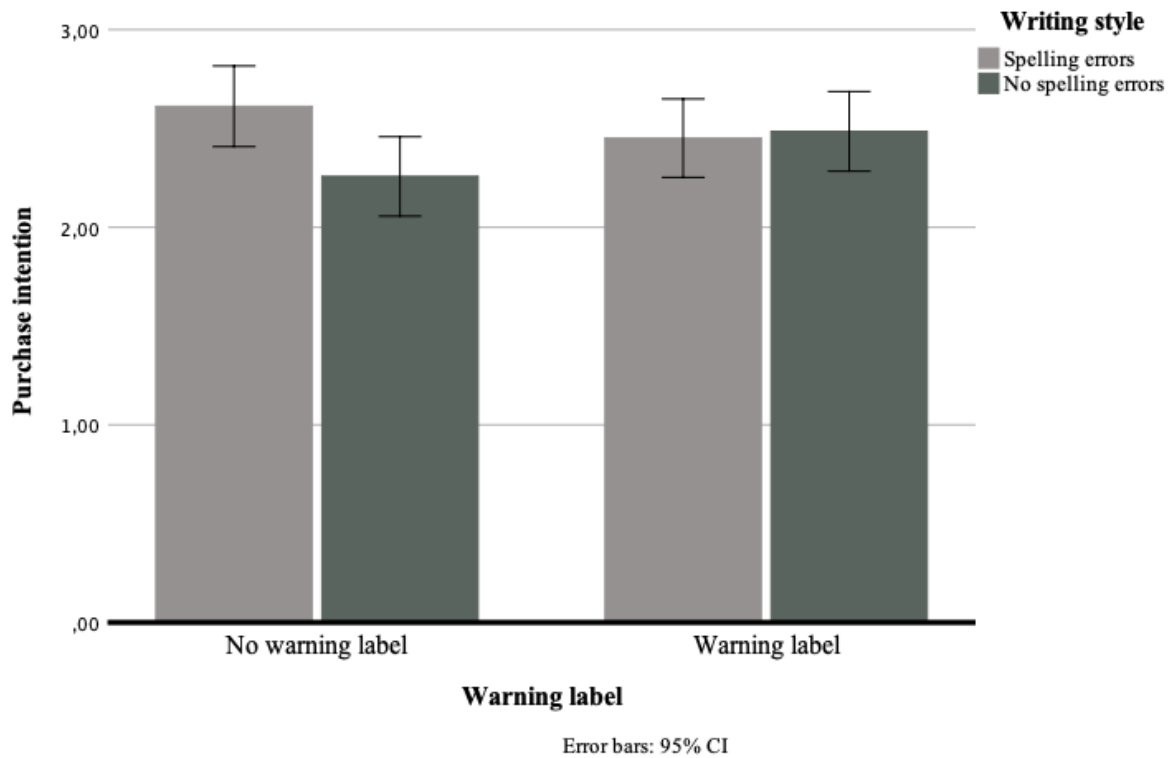
4.4. Interaction effects

H6 and H7 assume that there is an interaction effect between a warning label and the writing style or the username. To test these hypotheses, the same univariate analysis of variance (ANOVA) as for H1, H2 and H3 was performed.

H6 expected that an interaction effect takes place between the warning label and of writing style where the negative effect of writing style on purchase intention decreases when a warning label is attached to the review. In this study there were two options regarding the warning label (no warning label/warning label) and the quality of writing (spelling errors/no spelling errors). The univariate analysis of variance showed a significant effect of warning label and writing style on purchase intention ($F(1, 276) = 2.778, p = .050$). When the warning label is added, the negative effect of writing style decreases. Figure 4.1 shows the effect of adding a warning label to a review. When a warning label is missing from a review that is free of spelling errors, the purchase intention is lower than when a warning label is included. When a review is free of spelling problems, people are more likely to believe the negative review and therefore would not purchase at the travel agency. However, when a warning label is attached to the review without spelling errors the purchase intention slightly increases. This indicates that people realize the review is fake and therefore let it not influence their purchase intention. In addition, the difference in purchase intention that occurs when a warning label is not present does not apply when a warning label is present, implying that adding a warning label reduces the negative effect of writing style on purchase intention.

Figure 4.1

Comparing the effect of (in)correct writing with (no) warning label on purchase intention



Note. Number of warning label = 140, number of no warning label = 136, total = 276

According to H7 there is an interaction between the warning label and the username in that the negative effect of the username on purchase intention decreases when a warning label is attached compared to when there is no warning label attached. As with the warning label and writing style, the username also had two options (real username/fake username). The results of the univariate analysis of variance demonstrated that there was no significant interaction effect found between these variables which contradicts H7 ($F(1, 276) = 0.021, p = .866$). Therefore, negative reviews with a fake username do not cause a higher purchase intention if a warning label is not included. In conclusion, H6 is supported whereas H7 is rejected.

There was no hypothesis developed about the interaction effect between the writing style and the username. However, the performed ANOVA analysis does test this effect and tests that the interaction effect of the writing style and the username show a marginally significant effect on the purchase intention based on $.100 > p > .050$ ($F(1, 276) = 3.723, p = .055$).

4.5. Manipulation check

A manipulation check was performed at the end of the survey to see if the respondents were taking the experiment seriously. This check consisted of three questions about the warning label, writing style and username.

The first statement, “This review included a warning label”, had the answer options “No” “Yes” and “I don’t know”. Table 4.2 shows that when a warning label was added to the review, only 9.9% of the respondents that saw a warning label remembered it had a warning label and 35.5% respondents apparently did not know whether there was a warning label included. When there was no warning label shown, only 22.8% of the respondents remembered that there was no warning label compared to 19.9% respondents who still thought there was a warning label included. Also, 57.4% of the respondents did not remember whether they had seen a warning label when there was no warning label shown. Additionally, a chi-square test revealed a significant asymmetry across cells ($\chi^2(2, N=277)=36.51; p<.001$), meaning that the conditions differ when a warning label is added to the review compared to when it is not. As a result, it is possible that consumers were not paying close enough attention when reading the review and missed the warning label. Another possibility is that the participants had no idea what a warning label was and hence could not respond to the manipulation check question.

Table 4.2

Manipulation Check Warning Label

		Warning label	No warning label	Total
<i>“This reviews included a warning label”</i>	No	14 (9.9%)	31 (22.8%)	45 (16.2%)
	Yes	77 (54.6%)	27 (19.9%)	104 (37.5%)
	I don’t know	50 (35.5%)	78 (57.4%)	128 (46.2%)
	Total	141 (100%)	136 (100%)	277 (100%)

The second manipulation check tested the writing style of the review stating “This review was written correctly” with the options to answer “No”, “Yes”, and “I don’t know”. Table 4.3 shows that 87.1% of the respondents remembered that a review was written with spelling errors when it was. However, when a review included no spelling errors only 50% of the respondents chose the option that it was correctly written, against 35.5% who thought it was written incorrectly when it was written correctly. The number of people who did not know the answer to this question is relatively low. A chi-square test also revealed a significant asymmetry in the cells ($\chi^2(2, N=277)=81.15; p<.001$), meaning that the conditions of having spelling errors

and not having spelling errors differ from each other. A considerable number of people remembered that the review was written incorrectly. Therefore, it can be assumed that the spelling errors were clearly present for participants to notice. However, another reasonable amount answered the manipulation check question wrong. It is possible that these participants did not pay full attention to the review and therefore did not answer the question correctly.

Table 4.3.

Manipulation Check Writing Style

		Spelling errors	No spelling errors	Total
<i>“This review was written correctly”</i>	No	121 (87.1%)	49 (35.5%)	170 (61.4%)
	Yes	8 (5.8%)	69 (50.0%)	77 (27.8%)
	I don’t know	10 (7.2%)	20 (14.5%)	30 (10.8%)
	Total	139 (100%)	138 (100%)	277 (100%)

The third manipulation check asked which user wrote the review. The real username that was used was Victor Janssen and the fake username was Vic.Jan3727726J. Table 4.4. shows that a considerable amount of the participants responded with “I don’t know”. It appeared that the respondents did not remember the real username nor the fake one. Out of the 132 respondents that were shown a fake review, only 28.0% answered the correct username. Only 27.1% out of the 144 respondents that were shown a real username, remembered the real username. In both cases, 66.3% of the respondents seem to forget or not notice the username of the review that was shown to them. Additionally, a chi-square test revealed a significant asymmetry across cells ($\chi^2(3, N=276)=51.94$; $p<.001$), meaning that the conditions of fake username and real username differ from each other. The great number of people who did not remember the username suggests that people did not pay enough attention to reading the review. However, it is also possible that people normally do not look at the username and therefore were not able to adequately answer the manipulation check question.

Table 4.4.

Manipulation Check Username

		Fake username	Real username	Total
<i>“Who wrote this review?”</i>	Victor Janssen	2 (1.5%)	39 (27.1%)	41 (14.9%)
	Vic.Jan3727726J	37 (28.0%)	8 (5.6%)	45 (16.3%)

Sop.Maas324	4 (3.0%)	3 (2.1%)	7 (2.5%)
I don't know	89 (67.4%)	94 (65.3%)	183 (66.3%)
Total	132 (100%)	144 (100%)	276 (100%)

4.6. Additional analyses

The tests did not show significant effects of the independent variables on the dependent variable. Nor did it show many mediation or interaction effects which leads to say that many of the hypotheses were rejected. The same tests were conducted after removing participants from the experiment that did not take longer than 10 seconds to look at the review. This means that 13.0% of the respondents were removed to gain new insights into the study's findings. To determine how long the participants should have at least looked at the review, the average time that people need to observe the review was investigated. The review itself was considerably long and therefore it was assumed that the people required some time to thoroughly read the review. A summary of the results showed that more than 13.0% looked at the review longer than 10 seconds which indicates that this is at least the time the participant required to observe the whole page of NOVITASOL and read what was written in the review.

After deleting a total of 36 respondents, the total effect of the warning label, writing style, or username on purchase intention remained unchanged. Also, no mediation effect was found for any of the three dimensions of credibility. However, as a result of the additional analyses, different results for the interaction hypotheses were obtained. The previous test showed that only an interaction effect of the warning label and writing style on purchase attention was significant ($F(1, 276) = 2.778, p = .050$).

Removing the participants reinforced the interaction effect on purchase intention and H5 appears to stay significant ($F(1, 233) = 7.671, p = .006$). This shows the effect of the amount of time that the respondents look at the review. Nevertheless, H6 was and remains rejected, which means that the interaction between warning label and username did not show significant effects even after removing several respondents ($F(1, 233) = .586, p = .445$). For H5 it shows the importance of carefully looking at the review and the Trustpilot page. It might be crucial that people look at the review for a longer amount of time. If they only look at it briefly, they might miss certain characteristics of the review that could change their purchase intention.

In addition, the variable "involvement" was developed as a control variable in this study to test what the relationship with source credibility on purchase intention is. Involvement is a key factor in explaining consumer behaviour and therefore the scale that was developed by Zaichkowsky (2012) was used in the experiment to measure consumer involvement. First,

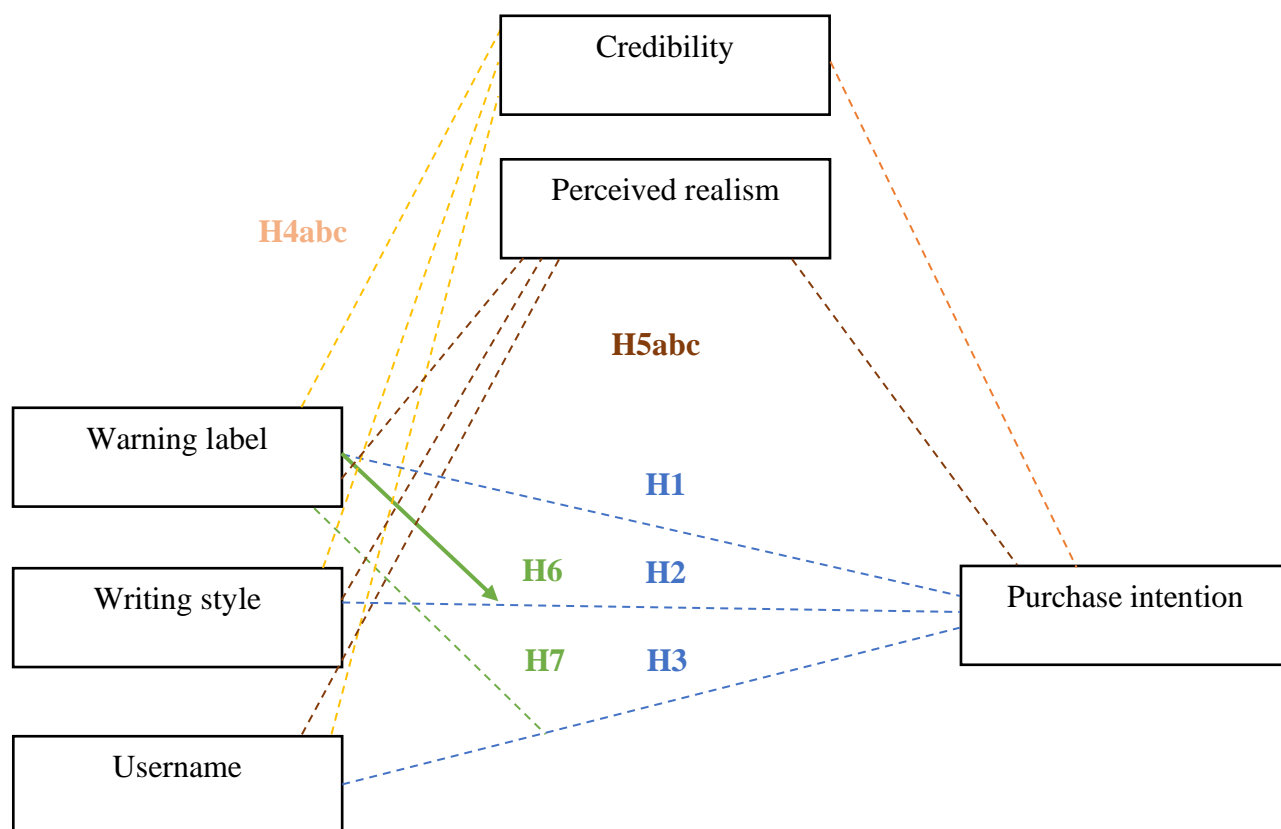
involvement showed to have a significant effect on purchase intention. Meaning that when people are highly involved the purchase intention increases ($R^2 = .091$, $F(1, 274) = 27,287$, $p < .001$, $\beta = -.30$). Additionally, the age did appear to have a significant effect on involvement ($R^2 = .02$, $F(1, 275) = 4.12$, $p = .043$). The higher the age, the lower the purchase intention ($\beta = -.12$). Gender, however, did not appear to have a significant effect on involvement ($R^2 = .01$, $F(1, 275) = 2.41$, $p = .112$).

The independent variables were tested to see whether they lead to difference in involvement. The warning label showed a significant effect on involvement ($R^2 = .023$, $F(1, 275) = 6,587$, $p = .011$, $\beta = .15$). This means that the addition of a warning label leads to a decrease of involvement. The same appeared for the writing style. The writing style showed to have a significant effect on involvement ($R^2 = .068$, $F(1, 275) = 19.976$, $p < .001$, $\beta = .26$), meaning that no spelling errors in a review lead to a higher consumer involvement. Username, however, did not show a significant effect on involvement ($R^2 = .000$, $F(1, 275) = 0.084$, $p = .772$). The findings of this study and the hypotheses are summarized in Table 4.8 and Figure 4.2.

The relationship between involvement and source credibility was also examined. This can explain whether it matters if a consumer is high or low involved. Involvement and credibility both already showed to have a significant effect on purchase intention. Additionally, involvement showed to have a significant effect on credibility ($R^2 = .360$, $F(1, 275) = 154.975$, $p < .001$, $\beta = .60$). Meaning that when involvement of the consumers increases, the credibility of the review increases, or the other way around. High credibility also leads to high involvement. However, involvement and credibility together did not appear to mediate an effect on purchase intention ($R^2 = .093$, $F(1, 273) = 14.067$, $p = .355$). In addition, it appeared that also no interaction effect of credibility on the relationship between involvement and purchase intention was found ($F(1, 276) = 1.131$, $p = .333$).

Table 4.8*Summary and Results of the Hypotheses*

H1: Including a warning label to a fake negative review leads to a higher purchase intention than not including a warning label.	Not supported
H2: No spelling errors in a negative review leads to a lower purchase intention than when a review includes spelling errors.	Not supported
H3: A more realistic username of a negative review leads to a lower purchase intention than a less realistic username.	Not supported
H4a: The credibility of negative reviews mediates the influence of a warning label on purchase intention.	Not supported
H4b: The credibility of negative reviews mediates the influence of the writing style on purchase intention.	Not supported
H4c: The credibility of negative reviews mediates the influence of the realistic username on purchase intention.	Not supported
H5a: The perceived realism of negative reviews mediates the influence of a warning label on purchase intention.	Not supported
H5b: The perceived realism of negative reviews mediates the influence of the writing style on purchase intention.	Not supported
H5c: The perceived realism of negative reviews mediates the influence of the username on purchase intention.	Not supported
H6: There is an interaction between the warning label and the writing style in that when a warning label is included, the negative effect of the writing style on purchase intention is reduced compared to when it is not.	Supported
H7: There is an interaction between the warning label and the username in that when a warning label is included, the negative effect of the username on purchase intention is reduced compared to when it is not.	Not supported

Figure 4.2.*Conceptual model*

5. Discussion

In this chapter, the research question will be further examined and answered through elaborating on the study's findings. This study attempted to determine to what extent reviews that have been flagged as fake or have credibility issues affect purchase intention of the consumer. The overarching topic of this study will be presented in the first section.

5.1. Main study

The main goal of this study was to test whether reviews with certain characteristics result in a different purchase intention. Therefore, the following research question was developed: *"To what extent do reviews about travel agencies on Trustpilot that are marked as fake or have credibility issues result in differences in purchase intention?"* Eleven hypotheses were developed and were tested in an online experiment to help answer the research question of this

study. In the following section the most important findings of this study will be discussed. In addition, the implications of the non-findings will be further elaborated on.

Only one hypothesis in this study could be supported by the findings of the experiment. H6 assumed that there would be an interaction between the warning label and the writing style in that when a warning label is included, the negative effect of the writing style on purchase intention is reduced compared to when it is not. This study supports this hypothesis and found that adding a warning label interacts with the writing style of the review. The test revealed that when a warning label is absent from a review that has no spelling errors, the purchase intention is lower compared to when a warning label is included. When a review is free from spelling errors, it is assumed that people believe the negative review easier. As a result, when a warning label is added, people are aware that the review is fake and will not let it influence them when making a purchase decision. In addition, the effect on purchase intention between having no spelling errors and having spelling errors narrows when a warning label is added. Therefore, this study showed that the addition of a warning label decreases the negative effect of writing style on purchase intention.

The three independent variables were expected to have an effect on purchase intention (H1,2,3). It was expected that the warning label would lead to an increase in purchase intention, because people would not base their purchase on the negative review that they were reading (H1). Previous research showed that adding a warning label to a message that contains fake news makes it unlikely that readers believe the story and therefore unlikely that they will share it with their friends (Dizikes, 2020). It was found in previous studies that adding a warning label to fake news posts changes people's perception about the story (Halim, 2019). This study measured whether the warning label would change people's purchase intention. However, the results showed that adding a warning label has no effect on purchase intention and are not in line with the findings of Dizikes (2020). The findings showed that when the review is labelled with a warning it does not lead to a higher purchase intention as it was expected in this study. Based on the fact that purchase intention did not increase, it is assumed that people still take the fake negative review into account. This is in line with the previous study of Reyes-Menendez et al (2019) that found the paradox that describes that people have the feeling a review is fake, but still base their purchase intention on it which could explain this finding. In this study, the review was negative and therefore it was expected that people would assume the review is fake by the addition of a warning label. This was expected to lead to a higher purchase intention because the negative review would be ignored. Apparently, people are still not

convinced enough to ignore the review and therefore still consider it when they make a purchase decision.

Furthermore, a review with no spelling errors and a realistic username was expected to lower purchase intention because it would lead people to believe the negative review was genuine (H2, H3). However, tests did not support either of these hypotheses. Previous studies showed that a consumer's experience with a review can vary depending on the writing style and readability of the review (Hu et al., 2012). The readability of the review is an important aspect in determining whether or not a review is credible (Hu et al., 2012). Therefore, it was expected that no spelling errors in a review would result in a lower purchasing intention since consumers would believe the negative review. However, these spelling errors did not appear to have an impact on the likelihood of making a purchase. This could be the result of the fact that the respondents were unaware of the inclusion of spelling errors in the review or not, which was revealed by the manipulation test. During the manipulation check a total of 35.5% of 138 participants that were shown a review without spelling errors, answered the question “Was this review correctly written?” with “No”. This could have led to a different outcome than expected in the hypothesis. It might be that participants did not possess full knowledge about the Dutch language or were not paying enough attention to reading the review carefully. Therefore, this could have negatively influenced the expected effect the correctly written review would have had on purchase intention in this study.

Previous studies showed that people experience a review as fake when usernames include a lot of numbers (Powell, 2020) and abbreviations of real names (Forsey, 2019). Therefore, a realistic username was thought to result in a lower purchasing intention since customers would think the negative review was real and therefore believe it. However, a real username did not lead to a decrease in purchase intention. The manipulation check about the username showed that more than 66.3% of the respondents did not remember which username was used for the review, compared to only 28.0% of the respondents that chose the right username. This outcome could insinuate that people do not pay full attention when reading the review, which can explain why this study showed other findings than the previous research. It is possible that people did not observe the review and the username long enough and therefore missed the characteristics of the review that could point out that a review is fake or not. The Elaboration Likelihood Model already showed that people do not always extensively read the reviews that are shown to them (Petty & Cacioppo, 1968). This study confirms this theory by revealing that people did not pay close attention to the username of the person who wrote the

review and thus did not remember it. This could explain why no effect of the username on purchase intention was found.

In conclusion, the three independent variables did not appear to have an effect on people's purchase intention. The Theory of Planned Behaviour found that people's behavioural intention is predicted by attitude, subjective norms and perceived behavioural control. The stronger the perceived behavioural control and the more favourable the attitude and subjective norm, the greater the intention to undertake a given behaviour should be (Ajzen, 1991). It was expected that the warning label, writing style, and username would change people's attitude, play a role in subjective norms. Therefore, this was expected to make people willing to change their behaviour towards purchasing the service. In addition, previous studies show that reviews have a substantial influence on people's purchase intention (Lee & Choeh, 2014). However, this assumption is not in line with the findings of this study. The review and its characteristics did not lead to an effect on purchase intention.

It was also assumed that the credibility of negative reviews would mediate in the impact of a warning label, writing style and username on purchase intention (H4abc). The mediating variable "source credibility" states that constructs attractiveness, expertise and trustworthiness positively influence a receivers' attitude towards purchasing a product (Ohanian, 1990). Previous research showed that credibility is a crucial component in influencing people's purchasing intentions, and consumers frequently assess the credibility of online reviews before accepting them as credible (Shan, 2016). These studies showed that the components of credibility do indeed have an effect on purchase intention. The results of the present study are in line with previous research Ohanian (1990) and Shan (2016) who concluded that credibility is a crucial component in influencing people's purchase intention. Credibility still appeared to have an effect on purchase intention. When the attractiveness of a review increases, the purchase intention increases. But, when the trustworthiness and expertise of the review increases, the purchase intention showed to increase. Assuming that customers consider the negative review to be more credible, and therefore will not book a trip through the travel agency. In addition, it showed that no spelling errors lead to a higher perception of attractiveness and expertise, and the addition of a warning label led to more trustworthiness and expertise. However, in the results of this study no mediation effect was found meaning that none of the components of source credibility mediated in the effect of a warning label, writing style, and username on purchase intention. The present study showed no different effect on credibility of the reviews that included a warning or not, included spelling errors or not, or had a fake or real username and therefore did not mediate on purchase intention. Additionally, based

on earlier findings in this study, the warning label, writing style and username did not appear to have an effect on purchase intention. This could explain the none-findings of this mediation, assuming that even with credibility as a mediator the three independent variables do not influence purchase intention. Knowing that credibility has an effect on purchase intention, future studies could test whether credibility might act as a moderator effect instead of mediator.

It was also expected that perceived realism mediates with the warning label, writing style and username on purchase intention (H5abc). Perceived realism describes how much a certain story relates to a real-world experience. When the story lacks realism it will not be experienced as a story that could happen in real life (Hall, 2003). According to Hall (2003) perceived realism is an important construct in the persuasion process of the purchase. Because reviews help people in their decision making process (Choi et al., 2016), the reviews can persuade the reader, especially when the review is realistic (Hall, 2003). The present study is in line with the findings of Choi et al (2016) and Hall (2003) in that the perceived realism showed to have an effect on purchase intention. This study showed that when the perceived realism of the negative review increases, the purchase intention decreases. This can be explained by the fact that when the negative review is perceived as real, the readers will accept the review and therefore not purchase at the travel agency. In addition, it was found that the addition of a warning label leads to a higher factuality, meaning that when a warning label is included people assume that the review could be telling a real-life story. Also, no spelling errors would lead to an increase of narrative consistency, meaning that no spelling errors lead to the story being more coherent and consistent. Nevertheless, there was no mediation effect found of the warning label, writing style, and username with perceived realism on purchase intention. The three independent variables had no effect on purchase intention or perceived realism, according to the tests. As a result, it is possible that these three independent variables have no effect on either the perception of the realism of the review or the purchase intention and therefore also not mediate on purchase intention. Assuming that the warning label, writing style and username do not have are not strong predictors of purchase intention.

Finally, studies showed that the addition of a warning label to fake posts makes people less likely to believe the labelled message (Pennycook et al., 2020). In addition, when usernames are fake they often include a lot of numbers (Powell, 2020) and abbreviations of real names (Forsey, 2019). That is why it was expected that there would be an interaction effect between the warning label and the username in that when a warning label is included, the negative effect of the username on purchase intention is reduced compared to when a warning label is not added (H7). Contrary to the interaction of the warning label and writing style, there

was no significant interaction effect found between a warning label and the username on purchase intention in that the effect of the username on purchase intention decreases when a warning label is also included. Meaning that the username does not have an effect on the purchase intention, not even when a warning label is included. Again, this can be explained by the lack of attention people appeared to show when looking at the username in this study. Therefore, the interaction between the warning label and username might not have shown a significant result, based on the results of the manipulation check. This finding is consistent with prior research on The Elaboration Likelihood Model, which suggested that people do not always read the review that is presented to them thoroughly. As a result, the username's non-findings in this study could be explained by this. It is reasonable to presume that people do not read the review in its entirety and do not pay attention to the username. According to ELM, there are two ways to persuade people, depending on their level of involvement. However, no effect of the username on involvement was found in this study, indicating that people pay little attention to the username of the person who wrote the review, regardless of how involved they are.

In addition, involvement did appear to have an effect on purchase intention. Meaning that when people are highly involved, their purchase intention goes down. This can be explained by people extensively reading the negative review, not noticing it is fake and therefore not purchase at the travel agency. The relationship between source credibility and involvement on purchase intention was also examined. Both involvement and credibility appeared to have a significant effect on purchase intention as separate variables. Also, involvement has a significant effect on credibility, meaning that when people are highly involved, the credibility increased. However, the variables did not mediate or interact with each other on purchase intention. Meaning that there is a relationship between credibility and involvement, but not on purchase intention. Previous studies found that both credibility and involvement are important components in determining purchase intention. The present study showed the same effect of the variables separate on purchase intention. In addition, it shows that involvement does effect credibility. This can be explained that when people are highly involved they are on the central route of ELM, meaning that these people are persuaded through deep examination, arguments and facts of the message. When people are highly involved they find the review important, interesting, meaningful, necessary etc. However, when participants of this study would be highly involved, they would not see the review as credible. Because when they would extensively read the review, it was expected that the review would be fake and therefore not credible. The

contradictory finding might mean that people actually do not notice characteristics that would make them perceive the review as fake.

5.2. Practical implications

The outcomes of this study have implications for travel agencies, Trustpilot as well as for consumers that are reading reviews. These implications will be further discussed in the following section. First, what can travel agencies learn from this research? Previous research found that negative reviews can have a substantial effect on a company's sales, which shows the importance of detecting fake negative reviews. Therefore, it is important for the travel branch to understand fake reviews. Travel agencies receive online reviews about their company and want their people to purchase their services. They do not want to lose customers or revenues over reviews that are not genuine. The travel branch is not using the warning label yet to warn their consumers about potential fake reviews. This study showed that a warning label can decrease the negative effect of writing style on purchase intention. When a review is free of spelling errors and appears to be genuine, a warning label can assist consumers to recognize it is a fake review. Adding a warning label to reviews that do not include spelling errors would reduce the loss of customers due to the increase of purchase intention of these travel agencies.

Therefore, it is important for travel agencies to find a platform where they guarantee a transparent way of publishing reviews. That is where Trustpilot comes into play. Trustpilot wants to ensure that they are creating an environment for their clients where they are reading credible reviews. However, fake reviews are also spreading on Trustpilot's website. As a result, implementing the warning label to ensure that fake reviews do not circulate on their website would be beneficial to their image. This study showed that adding a warning label to a fake review decreases the negative effect of writing style on purchase intention. This is an interesting finding for Trustpilot because it shows that the warning label is effective and influences people's decision making process. Therefore, when Trustpilot would have the correct algorithmic resources to find reviews that include many spelling errors and recognize the fake ones, their system could attach a warning label to it, knowing it will have an effect on people. Like this, Trustpilot ensures that the reviews their clients are reading are real, and if they are not, they are labelled.

Finally, what implications does this study have for consumers? According to previous research fake online reviews are rising and therefore consumers get to deal with these fake reviews more often. However, this study showed that people might not always pay full attention when they are reading a review. Based on this, it would be recommended for consumers to be

aware of the amount of fake reviews and pay more attention to the characteristics to see whether the review is fake or not. Otherwise, the consumers might change their purchase behaviour on a review that is not the genuine opinion about the travel agency. In addition, it is important that people pay full attention to the review, because the effect of involvement on credibility shows that when people are highly involved, the credibility also increases. This indicates that people might not be as aware of the signs that a review is fake as was expected. Therefore, consumers should keep reading reviews, but be more serious with looking at the signs that could make them realize the review is fake.

5.3. Limitations and future research

The findings of this study did not support all of the hypotheses. The experiment was subject to certain limitations, which may have influenced the results. This section will go through these limitations in further detail and make recommendations for future research.

The first limitation that should be taken into account is that this experiment took place during a pandemic. COVID-19 made it a lot harder for people to travel. Therefore, compared to a situation in which COVID-19 does not exist, other factors in a negative review could be seen as important. Nevertheless, it was assumed that people still can imagine a time after COVID-19, where they look at the future and still want to book trips to go abroad. It is assumed that people want to travel after being banned from travelling for more than a year. However, people might have consciously or unconsciously taken other factors into account when they read the review in the experiment. This could have influenced the results of this study. Future topic of study could be to perform the same study in times where COVID-19 has passed, comparing whether pandemic did or did not have any effect on the results of this study.

Furthermore, the supplied material of manipulated Trustpilot reviews was made with Adobe Photoshop in order to mimic the original Trustpilot website as accurately as possible. To avoid any confusion with the real travel agency NOVASOL, the name was changed to NOVITASOL. Because people have no personal experience with NOVITASOL as a travel agency it could have led to the website appearing less trustworthy towards the respondents. Because people might be familiar with Trustpilot's real website, participants could have noticed some differences in the review shown to them due to the small changes that were done which eventually might have influenced the study's results. In addition, the star-rating of the other reviews posted on Trustpilot's page was included in the screenshot of NOVITASOL. Because this star-rating appears on the real Trustpilot webpage, it was decided to keep it in the

experiment to keep the page looking as realistic as possible. However, this could have led to respondents considering that rating while answering the experiment's questions.

Another possibility for the findings not matching the hypothesis is that the warning label was set in a position where it was not visible enough. The manipulation check revealed that when a warning label was added, many respondents were unaware of its presence. In the situation where there was no warning label added to the review, the respondents also did not remember whether they had seen a warning label or not. A large red space with an exclamation mark was used as a warning label which would suggest that the warning label would be noticeable enough. Nevertheless, previous studies showed that the location of the warning label is also important in order for the warning label to have an influence on the purchase intention (Halim, 2019). More research could be done to examine which designs and placements for a warning label catch more attention than others.

It was found that deleting certain respondents from the group that took part in the experiment did not change the outcome of the tests. These respondents were eliminated because they did not spend more than 10 seconds reading the review. It is possible that respondents should be better informed about reading the review and double-checking everything. In the experiment, however, this was accomplished by saying, "Take a good look at the page and read the review carefully." If the researcher had given even more instructions, it might have been too clear, leading to the respondents being pushed in a certain manner.

Possible future research topics could include the control variable of this study. Involvement was used to further explain the findings of this study and the relationship with involvement and source credibility on purchase intention. Involvement captures the different motivations which can explain consumer behaviour. This study showed that high and low involvement significantly appeared to have a different effect on purchase intention. In addition, the warning label and no spelling errors appeared to lead to an increase in involvement. This finding could be further discussed in future studies to see whether involvement as a mediator or moderator variable might lead to an effect on purchase intention. This could explain personal elements of a person's attitude and therefore explain people's motivations for individual behaviour.

In addition, with the findings of this study we now know what factors influence the purchase intention and which not. Now, it could be interesting for a future study to perform qualitative research using an interview survey design. With this, the researcher can get more insight into the thought processes behind the numbers. This is expected to lead to deeper explanations about why certain results were found.

Additionally, because the characteristics of reviews that were used in this study did not all lead to significant findings, it could be researched whether other characteristics would have a more significant effect on purchase intention. Previous studies already showed that multiple characteristics make people perceive a review as fake. The activity of the user that wrote the review was one other characteristic that can be studied. People perceive a review as fake when they see the user post multiple times about one company. Another characteristic to study would be the timing of the review. Meaning that it matters when the review was posted. For example, the review could be three years old and not matter at this moment.

6. Conclusion

In this study an experiment was performed to assess the influence of a warning label, the writing style, and the username of a fake negative review on purchase intention. A quantitative research was executed using an online experiment design testing different conditions of fake negative reviews. The research question that was studied was: “To what extent do reviews about travel agencies on Trustpilot that are marked as fake or have credibility issues result in differences in purchase intention?”. This study did not show differences in purchase intention when reviews are marked as fake or when they have credibility issues such as spelling errors or fake usernames. This means that the purchase intention did not increase when a warning label was added to a fake negative review and that the purchase intention did not decrease when a negative review had no spelling mistakes or a realistic username. The none-finding effect of the warning label is in line with a previous study that found that people are aware of a review being fake, but still rely their purchase on it. In this study, the purchase intention was expected to increase, because people would not rely on the review. Nevertheless, purchase intention did not rise and therefore it is assumed that people still took the review into account.

In addition, the sub-question asked if there was a relationship between credibility and involvement in terms of purchase intention. There appeared to be no influence on purchasing intention, however involvement did have an effect on credibility. When people are highly involved, the credibility of the review also increases. However, this result can be found contradictory. It is assumed that when people are highly involved, they realize the review is fake and therefore not credible. This finding might insinuate that people are actually not that aware of characteristics that make them perceive a review as fake.

However, adding a warning label to a fake review did appear to decrease the negative effect of writing style on purchase intention. As a result, adding a warning label to a fake review

with bad writing has a visible effect. The warning label and writing style as separate variables did not have an effect on people's purchase intention. The results of the tests revealed that when a review with and without spelling errors is compared without the addition of a warning label, there is a greater difference in purchase intention. As a result, the gap between having no spelling errors and having spelling errors narrows because of the warning label. This finding can be valuable for companies such as Trustpilot that strive to provide genuine reviews by using the warning label. Adding a warning label to a fake review could therefore help customers but also companies as they gain more credibility.

The username, on the other hand, appeared to have no effect on purchase intention in study. Several respondents showed that they did not recall the username of the review that was shown to them in the experiment during the manipulation check. This could indicate that people are not paying full attention to the review, implying that one of the characteristics of a fake review is not being observed by the respondents. This is in line with the Elaboration Likelihood Model where it is assumed that people do not always pay full attention when they are reading a review. Therefore, the username could be a characteristic of the review that people often do not pay attention to.

This study provided a further look into the efficiency of the warning label. Therefore, reviews that are marked as fake or have credibility issues do not result in differences in purchase intention. However, the warning label does reduce the negative effect of writing style on purchase intention. In a world where fake reviews are powerful and on the rise, understanding the mechanism of a warning label can serve to create more transparency about reviews. This warning label therefore can lead to consumers making their purchase decision based on a truthful and genuine review.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology & Health*, 26(9), 1113–1127. <https://doi.org/10.1080/08870446.2011.613995>
- Banerjee, S., & Chua, A. Y. K. (2014). Understanding the process of writing fake online reviews. *Ninth International Conference on Digital Information Management*, 68–73. <https://doi.org/10.1109/icdim.2014.6991395>
- Befurt, R., & Silk, A. J. (2016). How purchase probability scales can shed light on consumer purchase intentions. *Landslide Magazine*, 12(1), 1. <https://www.analysisgroup.com/globalassets/uploadedfiles/content/insights/publishing/2019-befurt-silk-how-purchase-probability-scales-shed-light-consumer-purchase.pdf>
- Bekmanova, G., Sharipbay, A., Omarbekova, A., Yelibayeva, G., & Yergesh, B. (2017). Adequate assessment of the customers actual reviews through comparing them with the fake ones. *2017 International Conference on Engineering and Technology (ICET)*. Published. <https://doi.org/10.1109/icengtechnol.2017.8308158>
- Borghi, M., & Mariani, M. M. (2020). Service robots in online reviews: Online robotic discourse. *Annals of Tourism Research*, 103036. <https://doi.org/10.1016/j.annals.2020.103036>
- Brown, R. H. (2020). *Every move you make: Privacy in the age of the algorithm*. [Web log post]. Retrieved from <https://digitally.cognizant.com/every-move-make-privacy-age-algorithm-codex3679/>

- Chakraborty, U., & Bhat, S. (2018). Credibility of online reviews and its impact on brand image. *Management Research Review*, 41(1), 148–164. <https://doi.org/10.1108/mrr-06-2017-0173>
- Choi, S., Mattila, A. S., Van Hoof, H. B., & Quadri-Felitti, D. (2016). The role of power and incentives in inducing fake reviews in the tourism industry. *Journal of Travel Research*, 56(8), 975–987. <https://doi.org/10.1177/0047287516677168>
- Comcowich, W. (2019). *How to spot and respond to fake online reviews*. glean.info. https://glean.info/how-to-spot-and-respond-to-fake-online-reviews/?doing_wp_cron=1614015240.9187760353088378906250
- Cui, G., Lui, H., & Guo, X. (2012). The effect of online consumer reviews on new product sales. *International Journal of Electronic Commerce*, 17(1), 39–58. <https://doi.org/10.2753/jec1086-4415170102>
- Kenny, D. A. (2021, May 4th). *Mediation*. MedPower. <http://davidakenny.net/cm/mediate.htm#RR>
- Deng, S. (2016). Deceptive reviews detection of industrial product. *International Journal of Services Operations and Informatics*, 8(2), 122. <https://doi.org/10.1504/ijsoi.2016.080090>
- Dellarocas, C. (2006). Strategic manipulation of internet opinion forums: Implications for consumers and firms. *Management Science*, 52(10), 1577–1593. <https://doi.org/10.1287/mnsc.1060.0567>

- Dizikes, P. (2020). *The catch to putting warning labels on fake news*. MIT News | Massachusetts Institute of Technology. <https://news.mit.edu/2020/warning-labels-fake-news-trustworthy-0303>
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3), 307. <https://doi.org/10.2307/3172866>
- Downes, H. (2020). *How to spot a fake review*. Which? <https://www.which.co.uk/reviews/online-shopping/article/online-shopping/how-to-spot-a-fake-review-aiDaS3e1ivfr>
- Dragan, L. (2018). *Let's talk about amazon reviews: How we spot the fakes*. Wirecutter: Reviews for the Real World. <https://www.nytimes.com/wirecutter/blog/lets-talk-about-amazon-reviews/>
- Elliott, W. R., Rudd, R. L., & Good, L. (1983). Measuring the perceived reality of television: Perceived plausibility, perceived superficiality and the degree of personal utility. Paper presented at the Association for Education in Journalism and Mass Communication Convention, Corvallis, OR.
- Filieri, R., Alguezaui, S., & McLeay, F. (2015). Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth. *Tourism Management*, 51, 174–185. <https://doi.org/10.1016/j.tourman.2015.05.007>
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison-Wesley.

Fontanella, C. (2021). *The 14 best demographic questions to use in surveys*. [Web log post].

Retrieved from <https://blog.hubspot.com/service/survey-demographic-questions>

Forsey, C. (2019). *What's a finsta? We explain this confusing instagram trend*. [Web log

post]. Retrieved from <https://blog.hubspot.com/marketing/finsta>

Frost, J. (2020). *Understanding interaction effects in statistics*. Statistics By Jim.

<https://statisticsbyjim.com/regression/interaction-effects/>

Gössling, S., Hall, C. M., & Andersson, A.-C. (2016). The manager's dilemma: a

conceptualization of online review manipulation strategies. *Current Issues in Tourism*,

21(5), 484–503. <https://doi.org/10.1080/13683500.2015.1127337>

Green, M. C. (2004). Transportation into narrative worlds: The role of prior knowledge and

perceived realism. *Discourse Processes*, 38(2), 247-266

Gretzel, U., & Yoo, K. H. (2008). Use and impact of online travel reviews. *Information and*

Communication Technologies in Tourism 2008, 35–46. [https://doi.org/10.1007/978-3-](https://doi.org/10.1007/978-3-211-77280-5_4)

211-77280-5_4

Gu, S., & Wu, Y. (2019). Using the theory of planned behaviour to explain customers' online

purchase intention. *World Scientific Research Journal*, 5(9), 226–249.

[https://doi.org/10.6911/WSRJ.201909_5\(9\).0026](https://doi.org/10.6911/WSRJ.201909_5(9).0026)

Hall, A. (2003). Reading realism: Audiences' evaluations of the reality of media texts.

Journal of Communication, 53(4), 624–641. [https://doi.org/10.1111/j.1460-](https://doi.org/10.1111/j.1460-2466.2003.tb02914.x)

2466.2003.tb02914.x

- Halim, R.E. (2019). Warning Label Placement: The Difference Effect of Social Risk and Health Risk Consequences. *European Research Studies Journal*, vol. 0(2), pages 282-297.
- Hawkins, J. (2018). *How to deal with fake negative reviews on google*. Moz.
<https://moz.com/blog/fake-negative-reviews-on-google>
- Heydari, A., Tavakoli, M., Salim, N., & Heydari, Z. (2015). Detection of review spam: A survey. *Expert Systems with Applications*, 42(7), 3634–3642.
<https://doi.org/10.1016/j.eswa.2014.12.029>
- Hiilamo, H., Crosbie, E., & Glantz, S. A. (2012). The evolution of health warning labels on cigarette packs: the role of precedents, and tobacco industry strategies to block diffusion. *Tobacco Control*, 23(1). <https://doi.org/10.1136/tobaccocontrol-2012-050541>
- Hocevar, K. P., Metzger, M., & Flanagin, A. J. (2017). Source credibility, expertise, and trust in health and risk messaging. *Oxford Research Encyclopedia of Communication*.
Published. <https://doi.org/10.1093/acrefore/9780190228613.013.287>
- Hu, N., Bose, I., Koh, N. S., & Liu, L. (2012). Manipulation of online reviews: An analysis of ratings, readability, and sentiments. *Decision Support Systems*, 52(3), 674–684.
<https://doi.org/10.1016/j.dss.2011.11.002>
- Hu, X., & Yang, Y. (2020). What makes online reviews helpful in tourism and hospitality? A bare-bones meta-analysis. *Journal of Hospitality Marketing & Management*, 30(2), 139–158. <https://doi.org/10.1080/19368623.2020.1780178>

- Hubert, M., Blut, M., Brock, C., Backhaus, C., & Eberhardt, T. (2017). Acceptance of Smartphone-Based mobile shopping: Mobile benefits, customer characteristics, perceived risks, and the impact of application context. *Psychology & Marketing*, 34(2), 175–194. <https://doi.org/10.1002/mar.20982>
- Iam Cheated. (2020). *Things to know on fake reviews when shopping online*. <https://iamcheated.indianmoney.com/blogs/things-to-know-on-fake-reviews-when-shopping-online>
- Ingham, E. (2015). *48 hours on the copenhagen startup scene: Here's what i learned*. Forbes. <https://www.forbes.com/sites/edmundingham/2015/11/06/48-hours-on-the-copenhagen-start-up-scene-what-i-learned/?sh=1b9cdc9c69d2>
- Jensen, M. L., Averbek, J. M., Zhang, Z., & Wright, K. B. (2013). Credibility of anonymous online product reviews: A language expectancy perspective. *Journal of Management Information Systems*, 30(1), 293–324. <https://doi.org/10.2753/mis0742-1222300109>
- Jespersen, C. (2019). *Online reviews: How to figure out which are real and which are fake*. Asbury Park Press. [Web log post]. Retrieved from <https://eu.app.com/story/money/business/consumer/2019/04/26/online-reviews-how-figure-out-which-real-and-which-fake/3514351002/>
- Juuti, M., Sun, B., Mori, T., & Asokan, N. (2018). Stay On-Topic: Generating Context-Specific fake restaurant reviews. *Computer Security*, 132–151. https://doi.org/10.1007/978-3-319-99073-6_7

Kashti, R. P., & Prasad, P. S. (2019). Enhancing NLP techniques for fake review detection.

International Research Journal of Engineering and Technology (IRJET), 242–245.

<https://www.irjet.net/>

Kennedy, R. (2003). Evaluating New Zealand sports stars as celebrity endorsers : Intriguing

results. *ANZMAC*, 122–129. <http://hdl.handle.net/10536/DRO/DU:30020954>

Ketron, S. (2017). Investigating the effect of quality of grammar and mechanics (QGAM) in

online reviews: The mediating role of reviewer credibility. *Journal of Business*

Research, 81, 51–59. <https://doi.org/10.1016/j.jbusres.2017.08.008>

Kusumasondjaja, S., Shanka, T., & Marchegiani, C. (2012). Credibility of online reviews and

initial trust. *Journal of Vacation Marketing*, 18(3), 185–195.

<https://doi.org/10.1177/1356766712449365>

Lee, S., & Choeh, J. Y. (2014). Predicting the helpfulness of online reviews using multilayer

perceptron neural networks. *Expert Systems with Applications*, 41(6), 3041–3046.

<https://doi.org/10.1016/j.eswa.2013.10.034>

Lester, P. (2020). *Fake reviews make consumers more than twice as likely to choose poor-*

quality products. [Web log post]. Retrieved from

<https://www.which.co.uk/news/2020/05/the-real-impact-of-fake-reviews/>

Li, N., Du, S., Zheng, H., Xue, M., & Zhu, H. (2018). Fake reviews tell no tales? Dissecting

click farming in content-generated social networks. *China Communications*, 15(4),

98–109. <https://doi.org/10.1109/cc.2018.8357744>

- Li, Z., & Yin, Y. (2018). Attractiveness, expertise and closeness: The effect of source credibility of the first lady as political endorser on social media in China. *Global Media and China*, 3(4), 297–315. <https://doi.org/10.1177/2059436418819228>
- Luca, M., & Zervas, G. (2016). Fake it till you make it: Reputation, competition, and yelp review fraud. *Management Science*, 62(12), 3412–3427.
<https://doi.org/10.1287/mnsc.2015.2304>
- Nadkarni, S. (2021). *How to identify fake book reviews on goodreads and other websites*. GoBookMart. <https://gobookmart.com/how-to-identify-fake-book-reviews-on-goodreads-and-other-websites/>
- Manes, E., & Tchetchik, A. (2018). The role of electronic word of mouth in reducing information asymmetry: An empirical investigation of online hotel booking. *Journal of Business Research*, 85, 185–196. <https://doi.org/10.1016/j.jbusres.2017.12.019>
- Mathews Hunt, K. (2015). Gaming the system: Fake online reviews v. Consumer law. *Computer Law & Security Review*, 31(1), 3–25.
<https://doi.org/10.1016/j.clsr.2014.11.003>
- McCroskey, J. C., & Teven, J. J. (1999). Goodwill: A reexamination of the construct and its measurement. *Communication Monographs*, 66, 90-103.
<http://dx.doi.org/10.13072/midss.514>
- Moon, S., Kim, M.-Y., & Bergey, P. K. (2019). Estimating deception in consumer reviews based on extreme terms: Comparison analysis of open vs. closed hotel reservation platforms. *Journal of Business Research*, 102, 83–96.
<https://doi.org/10.1016/j.jbusres.2019.05.016>

- Murphy, R. (2021). *Local consumer review survey: How customer reviews affect behavior*. BrightLocal. <https://www.brightlocal.com/research/local-consumer-review-survey/#fake-reviews>
- O’Keefe, D. J. (2013). Elaboration likelihood model. *The International Encyclopedia of Communication*, 1475–1480. <https://doi.org/10.1002/9781405186407.wbiece011.pub2>
- Pennycook, G., Bear, A., Collins, E. T., & Rand, D. G. (2020). The implied truth effect: Attaching warnings to a subset of fake news headlines increases perceived accuracy of headlines without warnings. *Management Science*, 66(11), 4944–4957. <https://doi.org/10.1287/mnsc.2019.3478>
- Petrescu, M., O’Leary, K., Goldring, D., & Ben Mrad, S. (2018). Incentivized reviews: Promising the moon for a few stars. *Journal of Retailing and Consumer Services*, 41, 288–295. <https://doi.org/10.1016/j.jretconser.2017.04.005>
- Pitman, J. (2020). *Fake reviews are a real problem: 8 statistics that show why*. BrightLocal. <https://www.brightlocal.com/learn/fake-reviews-are-a-real-problem-8-statistics-that-show-why/>
- Powell, D. (2020, January 27). *How to spot a fake online review* [Web log post]. Retrieved from <https://www.minclaw.com/spot-fake-online-review/>
- Rahman, A. S. (2019). Effects of nanofibers on properties of geopolymer composites. *Nanotechnology in Eco-efficient Construction*, 123–140. <https://doi.org/10.1016/b978-0-08-102641-0.00006-2>
- Reuters. (2019). *Fake reviews: Time to come out fighting / travel industry news & conferences - reuters events*. Reuters Events Travel.

<https://www.reutersevents.com/travel/social-media-and-marketing/fake-reviews-time-come-out-fighting>

Reyes-Menendez, A., Saura, J. R., & Filipe, F. (2019). The importance of behavioral data to identify online fake reviews for tourism businesses: A systematic review. *PeerJ Computer Science*, 5(e219). <https://doi.org/10.7717/peerj-cs.219>

Roberts, C. (2010). Correlations among variables in message and messenger credibility scales. *American Behavioural Scientist*, 54(1), 43–56.
<https://doi.org/10.1177/0002764210376310>

Rohr, N. (2020). *Fake reviews: How to combat a growing online problem*. Search Engine Watch. <https://www.searchenginewatch.com/2020/12/09/fake-reviews-how-to-combat-a-growing-online-problem/>

Sallam, M. A. A., & Wahid, N. A. (2012). Endorser credibility effects on yemeni male consumer's attitudes towards advertising, brand attitude and purchase intention: The mediating role of attitude toward brand. *International Business Research*, 5(4), 55.
<https://doi.org/10.5539/ibr.v5n4p55>

Schuitema, G., Aravena, C., & Denny, E. (2020). The psychology of energy efficiency labels: Trust, involvement, and attitudes towards energy performance certificates in Ireland. *Energy Research & Social Science*, 59, 101–301.
<https://doi.org/10.1016/j.erss.2019.101301>

Shan, Y. (2016). How credible are online product reviews? the effects of self-generated and system-generated cues on source credibility evaluation. *Computers in Human Behavior*, 55, 633-641. <https://doi.org/10.1016/j.chb.2015.10.013>

Streitfeld, D. (2011). *Ferreting out fake reviews online*. The New York Times.

<https://www.nytimes.com/2011/08/20/technology/finding-fake-reviews-online.html>

Thomas, A. (2021). *The secret ratio that proves why customer reviews are so important*.

Inc.com. [https://www.inc.com/andrew-thomas/the-hidden-ratio-that-could-make-or-break-your-](https://www.inc.com/andrew-thomas/the-hidden-ratio-that-could-make-or-break-your-company.html#:~:text=A%20customer%20who%20has%20a,to%20leave%20a%20good%20review.&text=Your%20company%20or%20product%20rating,of%20good%20and%20bad%20reviews)

[company.html#:~:text=A%20customer%20who%20has%20a,to%20leave%20a%20good%20review.&text=Your%20company%20or%20product%20rating,of%20good%20and%20bad%20reviews](https://www.inc.com/andrew-thomas/the-hidden-ratio-that-could-make-or-break-your-company.html#:~:text=A%20customer%20who%20has%20a,to%20leave%20a%20good%20review.&text=Your%20company%20or%20product%20rating,of%20good%20and%20bad%20reviews).

Wang, P., Angarita, R., & Renna, I. (2018). Is this the era of misinformation yet. *Companion of the The Web Conference 2018 on The Web Conference 2018 - WWW '18*, 1557–1561. <https://doi.org/10.1145/3184558.3191610>

Wang, W., Li, F., & Yi, Z. (2019). Scores vs. Stars: A regression discontinuity study of online consumer reviews. *Information & Management*, 56(3), 418–428. <https://doi.org/10.1016/j.im.2018.08.002>

Wang, Z., Gu, S., & Xu, X. (2018). GSLDA: LDA-based group spamming detection in product reviews. *Applied Intelligence*, 48(9), 3094–3107. <https://doi.org/10.1007/s10489-018-1142-1>

Wu, Y., Ngai, E. W. T., Wu, P., & Wu, C. (2020). Fake online reviews: Literature review, synthesis, and directions for future research. *Decision Support Systems*, 132, 113280. <https://doi.org/10.1016/j.dss.2020.113280>

Xie, H., Miao, L., Kuo, P.-J., & Lee, B.-Y. (2011). Consumers' responses to ambivalent online hotel reviews: The role of perceived source credibility and pre-decisional

disposition. *International Journal of Hospitality Management*, 30(1), 178–183.

<https://doi.org/10.1016/j.ijhm.2010.04.008>

Xie, W., Yu, B., Zhou, X., Sedikides, C., & Vohs, K. D. (2014). Money, moral transgressions, and blame. *Journal of Consumer Psychology*, 24(3), 299–306.

<https://doi.org/10.1016/j.jcps.2013.12.002>

Zaichkowsky, J. L. (2012). Consumer involvement: Review, update and links to decision neuroscience. *Handbook of developments in consumer behaviour*, 523–548.

<https://doi.org/10.4337/9781849802444.00022>

Zhang, D., Zhou, L., Kehoe, J. L., & Kilic, I. Y. (2016). What online reviewer behaviors really matter? Effects of verbal and nonverbal behaviors on detection of fake online reviews. *Journal of Management Information Systems*, 33(2), 456–481.

<https://doi.org/10.1080/07421222.2016.1205907>

Zhang, T., Li, G., Cheng, T. C. E., & Lai, K. K. (2017). Welfare economics of review information: Implications for the online selling platform owner. *International Journal of Production Economics*, 184, 69–79. <https://doi.org/10.1016/j.ijpe.2016.10.01>

Zhao, Y., Yang, S., Narayan, V., & Zhao, Y. (2013). Modeling consumer learning from online product reviews. *Marketing Science*, 32(1), 153–169.

<https://doi.org/10.1287/mksc.1120.0755>

Appendix A

All stories included the same story only some include spelling mistakes and some do not. The translated text reads:

This summer we booked a trip with NOVITASOL for the first time. Once and never again. We have experienced very bad service. After I paid for the trip, I did not receive a confirmation email. I tried to call NOVITASOL, but I could not get a hold of anyone. For three days I tried to call and then after an hour I finally got an employee on the line. The employee was very rude and abrupt. She quickly indicated that she did not see my booking in the system and refused to continue searching. I told her that I had already paid and the money had already been debited from the account. I received little understanding for this. I was even told that I should have contacted the tour company earlier, when they were the ones who could not be reached the first few days after my booking. I really do not recommend anyone to book with this organization. It only caused my family and me stress. This is not the feeling you expect after booking a nice sun holiday.

The warning label reads:

Watch out! According to our systems this review might be fake. [Click here for more information.](#)

Reizen en vakantie > Activiteiten en tours > Reisbureau



NOVITASOL Nederland

Reviews 2.475 • Goed



3,8 ⓘ



Schrijf een review



Reviews 2.475

Filter op:

Waardering

Nederlands ⓘ

<input type="checkbox"/>	Uitstekend	<div></div>	49%
<input type="checkbox"/>	Goed	<div></div>	33%
<input type="checkbox"/>	Gemiddeld	<div></div>	7%
<input type="checkbox"/>	Slecht	<div></div>	2%
<input type="checkbox"/>	Zeer slecht	<div></div>	9%

Zoek in reviews



Victor Janssen

2 reviews



Pas op! Volgens onze systemen is deze recensie mogelijk nep. [Klik hier voor meer informatie.](#)



Een dag geleden

Deze zomerr hebben wij voor het eerste een reis geboekt bij NovitaSol....

Deze zomerr hebben wij voor het eerste een reis geboekt bij NovitaSol. Eens en nooitweer. Wij hebben ontzettende slechte service ervaart. Nadat ik de reis betaald had ontving ik geen bevestigingsmail Ik probeerde Novitasol te bellen, maar ik kreeg niemand te pakken. 3 dagen lang probeerde te bellen kreeg vervolgens na een uur aan de lijn te hebben gehangen een medewerker aandelijn. De medewerekr was erg onebesdoft en kortaf ze gaf al vrij snel an mijnm boeking niet in het systeem te zienen werigerde door te zoeken. Ik vertelde dat ik al wel betaald had en het geld ook al van de rekening was afgeschreven hier kreeg ik weinig besgipr voor. Er werd me zelfs vertelt dat ik eerder contact met de reisorganisatie had moeten opnemen terwijl zei degenen waren die niet te bereiken waren de eerste dagen na mijn boeking. Ik raad echt iedereen af om bij deze organisatie te boeken hett bezorgde mij en mijn gezin alleen maar stresss. Dit is niet het gevoel wat je verwacht na het boekengre van een lekkere zonnenvakantie.

Nuttig Delen



Warning label – Spelling errors – Real username

Reizen en vakantie > Activiteiten en tours > Reisbureau



NOVITASOL Nederland

Reviews 2.475 • Goed



3,8 ⓘ

Probeer onze huiszoekant



Schrijf een review



Reviews 2.475

Filter op:

Waardering

Nederlands ⓘ

<input type="checkbox"/>	Uitstekend	<div></div>	49%
<input type="checkbox"/>	Goed	<div></div>	33%
<input type="checkbox"/>	Gemiddeld	<div></div>	7%
<input type="checkbox"/>	Slecht	<div></div>	2%
<input type="checkbox"/>	Zeer slecht	<div></div>	9%

🔍 Zoek in reviews



Victor Janssen

2 reviews



Pas op! Volgens onze systemen is deze recensie mogelijk nep. [Klik hier voor meer informatie.](#)



Een dag geleden

Deze zomer hebben wij voor het eerst een reis geboekt bij NOVITASOL...

Deze zomer hebben wij voor het eerst een reis geboekt bij NOVITASOL. Eens en nooit weer. Wij hebben ontzettende slechte service ervaren. Nadat ik de reis betaald had, ontving ik geen bevestigingsmail. Ik probeerde NOVITASOL te bellen, maar ik kreeg niemand te pakken. Drie dagen lang probeerde ik te bellen en kreeg vervolgens na een uur aan de lijn te hebben gehangen een medewerker aan de lijn. De medewerker was erg onbeschoft en kortaf. Ze gaf al vrij snel aan mijn boeking niet in het systeem te zien en weigerde door te zoeken. Ik vertelde dat ik al betaald heb en het bedrag ook al van mijn bankrekening was afgeschreven. Hier kreeg ik weinig begrip voor. Er werd me zelfs verteld dat ik eerder contact met de reisorganisatie had moeten opnemen, terwijl zij degene waren die niet te bereiken waren de eerste dagen na mijn boeking. Ik raad echt iedereen af om bij deze organisatie te boeken. Het bezorgde mijn gezin en mij alleen maar stress. Dit is niet het gevoel wat je verwacht na het boeken van een lekkere zonzvakantie.

👍 Nuttig 🔄 Delen



Warning label – No spelling errors – Real username

Reizen en vakantie > Activiteiten en tours > Reisbureau



NOVITASOL Nederland

Reviews 2.475 • Goed



Probeer onze huiszoekant



Schrijf een review



Reviews 2.475

Filter op:

Waardering

Nederlands

<input type="checkbox"/>	Uitstekend	<div></div>	49%
<input type="checkbox"/>	Goed	<div></div>	33%
<input type="checkbox"/>	Gemiddeld	<div></div>	7%
<input type="checkbox"/>	Slecht	<div></div>	2%
<input type="checkbox"/>	Zeer slecht	<div></div>	9%

Zoek in reviews



Vic.Jan3727726J

2 reviews



Pas op! Volgens onze systemen is deze recensie mogelijk nep.
[Klik hier voor meer informatie.](#)



Een dag geleden

Deze zomer hebben wij voor het eerst een reis geboekt bij NOVITASOL...

Deze zomer hebben wij voor het eerst een reis geboekt bij NOVITASOL. Eens en nooit weer. Wij hebben ontzettende slechte service ervaren. Nadat ik de reis betaald had, ontving ik geen bevestigingsmail. Ik probeerde NOVITASOL te bellen, maar ik kreeg niemand te pakken. Drie dagen lang probeerde ik te bellen en kreeg vervolgens na een uur aan de lijn te hebben gehangen een medewerker aan de lijn. De medewerker was erg onbeschoft en kortaf. Ze gaf al vrij snel aan mijn boeking niet in het systeem te zien en weigerde door te zoeken. Ik vertelde dat ik al betaald heb en het bedrag ook al van mijn bankrekening was afgeschreven. Hier kreeg ik weinig begrip voor. Er werd me zelfs verteld dat ik eerder contact met de reisorganisatie had moeten opnemen, terwijl zij degene waren die niet te bereiken waren de eerste dagen na mijn boeking. Ik raad echt iedereen af om bij deze organisatie te boeken. Het bezorgde mijn gezin en mij alleen maar stress. Dit is niet het gevoel wat je verwacht na het boeken van een lekkere zomervakantie.

Nuttig Delen



Warning label – No spelling errors – Fake username

Reizen en vakantie > Activiteiten en tours > Reisbureau



NOVITASOL Nederland

Reviews 2.475 • Goed



Schrijf een review



Reviews 2.475

Filter op:

Waardering

Nederlands

<input type="checkbox"/> Uitstekend	<div></div>	49%
<input type="checkbox"/> Goed	<div></div>	33%
<input type="checkbox"/> Gemiddeld	<div></div>	7%
<input type="checkbox"/> Slecht	<div></div>	2%
<input type="checkbox"/> Zeer slecht	<div></div>	9%

Zoek in reviews



Victor Janssen

2 reviews



Een dag geleden

Deze zomerr hebben wij voor het eerste een reis geboekt bij NovitaSol....

Deze zomerr hebben wij voor het eerste een reis geboekt bij NovitaSol. Eens en nooitweer. Wij hebben ontzettende slechte service ervaren. Nadat ik de reis betaald had ontving ik geen bevestigingsmail Ik probeerde Novitasol te bellen, maar ik kreeg niemand te pakken. 3 dagen lang probeerde te bellen kreeg vervolgens na een uur aan de lijn te hebben gehangen een medewerker aandelijn. De medewerekr was erg onebescdoft en kortaf ze gaf al vrij snel an mijnm boeking niet in het systeem te zienen werigerde door te zoeken. Ik vertelde dat ik al wel betaald had en het geld ook al van de rekening was afgeschreven hier kreeg ik weinig besgip voor. Er werd me zelfs vertelt dat ik eerder contact met de reisorganisatie had moeten opnemen terwijl zei degenen waren die niet te bereiken waren de eerste dagen na mijn boeking. Ik raadt echt iedereen af om bij deze organisatie te boeken hett bezorgde mij en mijn gezin alleen maar stresss. Dit is niet het gevoel wat je verwacht na het boekengre van een lekkere zonnenvakantie.

Nuttig Delen



No warning label – Spelling errors – Real username

Reizen en vakantie > Activiteiten en tours > Reisbureau



NOVITASOL Nederland

Reviews 2.475 • Goed



Probeer onze huiszoekant



Schrijf een review



Reviews 2.475

Filter op:

Waardering

Nederlands

<input type="checkbox"/>	Uitstekend	<div></div>	49%
<input type="checkbox"/>	Goed	<div></div>	33%
<input type="checkbox"/>	Gemiddeld	<div></div>	7%
<input type="checkbox"/>	Slecht	<div></div>	2%
<input type="checkbox"/>	Zeer slecht	<div></div>	9%

Zoek in reviews



Vic.Jan3727726J

2 reviews



Een dag geleden

Deze zomerr hebben wij voor het eerste een reis geboekt bij NovitaSol....

Deze zomerr hebben wij voor het eerste een reis geboekt bij NovitaSol. Eens en nooitweer. Wij hebben ontzettende slechte service ervaart. Nadat ik de reis betaald had ontving ik geen bevestigingsmail Ik probeerde Novitasol te bellen, maar ik kreeg niemand te pakken. 3 dagen lang probeerde te bellen kreeg vervolgens na een uur aan de lijn te hebben gehangen een medewerker aandelijn. De medewerekr was erg onebesdcdoft en kortaf ze gaf al vrij snel an mijnm boeking niet in het systeem te zienen werigerde door te zoeken. Ik vertelde dat ik al wel betaald had en het geld ook al van de rekening was afgeschreven hier kreeg ik weinig besgirp voor. Er werd me zelfs vertelt dat ik eerder contact met de reisorganisatie had moeten opnemen terwijl zei degenen waren die niet te bereiken waren de eerste dagen na mijn boeking. Ik raadt echt iedereen af om bij deze organisatie te boeken hett bezorgde mij en mijn gezin alleen maar stressss. Dit is niet het gevoel wat je verwacht na het boekengre van een lekkere zonnenvakantie.

Nuttig Delen



No warning label – Spelling errors – Fake username

Reizen en vakantie > Activiteiten en tours > Reisbureau



NOVITASOL Nederland

Reviews 2.475 • Goed



Probeer onze huiszoekers!



Schrijf een review



Reviews 2.475

Filter op:

Waardering

Nederlands

<input type="checkbox"/> Uitstekend	<div></div>	49%
<input type="checkbox"/> Goed	<div></div>	33%
<input type="checkbox"/> Gemiddeld	<div></div>	7%
<input type="checkbox"/> Slecht	<div></div>	2%
<input type="checkbox"/> Zeer slecht	<div></div>	9%

Zoek in reviews



Vic.Jan3727726J

2 reviews



Een dag geleden

Deze zomer hebben wij voor het eerst een reis geboekt bij NOVITASOL...

Deze zomer hebben wij voor het eerst een reis geboekt bij NOVITASOL. Eens en nooit weer. Wij hebben ontzettende slechte service ervaren. Nadat ik de reis betaald had, ontving ik geen bevestigingsmail. Ik probeerde NOVITASOL te bellen, maar ik kreeg niemand te pakken. Drie dagen lang probeerde ik te bellen en kreeg vervolgens na een uur aan de lijn te hebben gehangen een medewerker aan de lijn. De medewerker was erg onbeschoft en kortaf. Ze gaf al vrij snel aan mijn boeking niet in het systeem te zien en weigerde door te zoeken. Ik vertelde dat ik al betaald heb en het bedrag ook al van mijn bankrekening was afgeschreven. Hier kreeg ik weinig begrip voor. Er werd me zelfs verteld dat ik eerder contact met de reisorganisatie had moeten opnemen, terwijl zij degene waren die niet te bereiken waren de eerste dagen na mijn boeking. Ik raad echt iedereen af om bij deze organisatie te boeken. Het bezorgde mijn gezin en mij alleen maar stress. Dit is niet het gevoel wat je verwacht na het boeken van een lekkere zomervakantie.

Nuttig Delen



No warning label – No spelling errors – Fake username

Appendix B

<i>Concept Measurement Instrument</i>	
What is your Gender?	Based on
Female	(Beldad & Hegner, 2018)
Male	
Other, namely:	
I rather not say	
What is your age?	
Open question	
What is your highest finished education?	
No education	(Beroepsonderwijs bedrijfsleven, 2020)
vmbo	
havo	
vwo	
mbo	
hbo bachelor	
wo bachelor	
wo master	
Ph.D or higher	
Do you ever book a trip at a travel agency?	
Never	
Almost never	
Sometimes	
Often	
Very often	
Do you ever read online reviews?	
Never	
Almost never	
Sometimes	
Often	
Very often	

**Are you familiar with platform
Trustpilot?**

No

Yes

I don't know

Purchase intention

I am considering booking a trip with NOVITASOL based on this review. (Dodds, Monroe and Grewal, 1991)

I plan to spend money on a trip with NOVITASOL based on this review.

I want to book a trip with NOVITASOL based on this review.

I look forward to booking a trip with NOVITASOL based on this review.

Source credibility

I experience the review about NOVITASOL as: (Ohanian, 1990)

Unattractive-Attractive

Not Classy-Classy

Ugly-Beautiful

Plain-Elegant

Not Sexy-Sexy

Undependable-Dependable

Dishonest-Honest

Unreliable-Reliable

Insincere-Sincere

Untrustworthy-Trustworthy

Not Expert-Expert

Inexperienced-Experienced

Unknowledgeable-Knowledgeable

Unqualified-Qualified

Unskilled-Skilled

Perceived realism

The review describes an experience that could potentially happen in real life. (Hall, 2003)

The experience in the review describes possible real life situations.

It is unlikely that it actually turned out the way it is described in this review.

Real people wouldn't do the things described in the review.

Not many people will experience the event described in the review.

The review describes an event that happens to many people.

What happened to the people in the review is what happens to people in the real world.

The review is based on facts.
The review showed something that actually happened.

What was described in the review actually happened.

The review described a cohesive story.

The story in the review was consistent.

The story in the review made sense.

Involvement

The review on Trustpilot for me is: (Zaichkowsky, 2012)

Important - Unimportant

Boring - Interesting

Relevant - Irrelevant

Exciting - Unexciting

Means a lot to me -Means nothing to me

Appealing – Unappealing

Fascinating - Mundane

Valuable - Worthless

Involving – Uninvolving

Needed - Not needed

Manipulation check

Who wrote this review?

This review contained a warning.

This review was written correctly.

Appendix C

Final Measurement Instrument

Fake online reviews

Start of Block: Introduction

Intro Welkom!

Bedankt voor je deelname aan dit onderzoek over recensies op het platform Trustpilot. Dit onderzoek voer ik uit voor mijn master thesis voor de opleiding Communicatiewetenschap aan de Universiteit Twente.

Je zult straks een recensie op de website Trustpilot zien en hier een aantal vragen en stellingen over krijgen. Deze vragen kun je beantwoorden op basis van jouw eigen mening. Op voorhand zullen enkele demografische gegevens worden gevraagd. Alle gegevens worden anoniem verwerkt en alleen gebruikt voor dit onderzoek. Alles wat je invult wordt dus anoniem verwerkt in het uiteindelijke onderzoek. Je deelname is geheel vrijwillig en kunt te alle tijden stoppen met dit onderzoek zonder een reden aan te geven. De vragenlijst zal 5 tot 10 minuten duren.

Alvast bedankt voor je deelname!

Robin Telmanr.e.m.telman@student.utwente.nl

Door rechtsonder op het pijltje te klikken ga je akkoord met de deelname en begin je met de vragenlijst.

End of Block: Introduction

Start of Block: Demographic Information

IntroDemo Allereerst krijg je een aantal vragen over jezelf te zien.

Gender Wat is je geslacht?

☐ Vrouw (1)

☐ Man (2)

☐ Anders, namelijk: (3) _____

☐ Zeg ik liever niet (4)

Age Hoe oud ben je? (Vul in in cijfers. Bijv.: 24)

Education Wat is je hoogst behaalde diploma op dit moment?

- ☐ vmbo (1)
- ☐ havo (2)
- ☐ vwo (3)
- ☐ mbo (4)
- ☐ hbo bachelor (5)
- ☐ wo bachelor (6)
- ☐ wo master (7)
- ☐ PhD of hoger (8)
- ☐ Geen opleiding (9)

Booking Boek je wel eens een vakantie bij een reisorganisatie?

- ☐ Nooit (1)
- ☐ Bijna nooit (2)
- ☐ Soms (3)
- ☐ Vaak (4)
- ☐ Heel vaak (5)

Reviews Lees je wel eens online recensies?

- ☐ Nooit (1)
- ☐ Bijna nooit (2)
- ☐ Soms (3)
- ☐ Vaak (4)
- ☐ Heel vaak (5)
-

Trustpilot Ben je bekend met het platform Trustpilot?

- ☐ Nee (1)
- ☐ Ja (2)
- ☐ Weet ik niet (3)

End of Block: Demographic Information

Start of Block: Introduction to conditions

IntrotexCon Stel je voor dat het weer normaal wordt om op vakantie te gaan na de coronacrisis. Je wilt een reis boeken en leest een aantal recensies over een reisorganisatie.

Op de volgende pagina krijg je een screenshot te zien van een recensie over reisorganisatie NOVITASOL op Trustpilot. Bekijk de pagina goed en lees de recensie aandachtig door. Daarna krijg je hier een aantal vragen over.

End of Block: Introduction to conditions

Start of Block: Condition 1

WarnCorrReal

WarnCorrRealTimer Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: Condition 1

Start of Block: Condition 2**NowarnIncorrReal**
.

-----**NowarnIncorrRealTime Timing**

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: Condition 2

Start of Block: Condition 3**NowarnCorrFake**
.

-----**NowarnCorrFakeTimer Timing**

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: Condition 3

Start of Block: Condition 4**WarnIncorrFake**
.

WarnIncorrFakeTimer Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: Condition 4

Start of Block: Condition 5**NowarnCorrReal**
.

-----**NowarnCorrRealTimer Timing**

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: Condition 5

Start of Block: Condition 6**NowarnIncorFake**
.

-----**NowarnIncorFakeTimer Timing**

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: Condition 6

Start of Block: Condition 7**WarnIncorrReal**
.

WarnIncorrRealTimer Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: Condition 7

Start of Block: Condition 8**WarnCorrFake**

.

WarnCorrFakeTimer Timing

First Click (1)

Last Click (2)

Page Submit (3)

Click Count (4)

End of Block: Condition 8

Start of Block: Purchase Intention

End of Block: Purchase Intention

Attractiveness Ik ervaar de getoonde recensie over NOVITASOL als:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Onaantrekkelijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Aantrekkelijk
Niet stijlvol	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Stijlvol
Lelijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Mooi
Lomp	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Elegant
Niet sexy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sexy

Trustworthiness Ik ervaar de getoonde recensie over NOVITASOL als:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Onafhankelijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Afhankelijk
Oneerlijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Eerlijk
Onbetrouwbaar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Betrouwbaar
Onoprecht	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Oprecht
Niet trouw	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Trouw

Expertise Ik ervaar de getoonde recensie over NOVITASOL als:

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Niet expert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Expert
Onervaren	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ervaren
Onwetend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Deskundig
Onbekwaam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bekwaam
Onhandig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Vaardig

End of Block: Source Credibility

Start of Block: Perceived Realism

Plausibility In hoeverre ben je het eens met de volgende stellingen?

	Helemaal mee oneens (1)	Oneens (2)	Neutraal (3)	Eens (4)	Helemaal mee eens (5)
De recensie beschrijft een ervaring die in het echte leven mogelijk zou kunnen gebeuren. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De ervaring in de recensie beschrijft mogelijke situaties uit het echte leven. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is onwaarschijnlijk dat het in het echt zo is gegaan als het is in deze recensie is beschreven. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Echte mensen zouden de dingen die in de recensie worden beschreven, niet doen. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Typicality In hoeverre ben je het eens met de volgende stellingen?

	Helemaal mee oneens (1)	Oneens (2)	Neutraal (3)	Eens (4)	Helemaal mee eens (5)
Niet veel mensen zullen de gebeurtenis die in de recensie wordt beschreven, meemaken. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De recensie beschrijft een gebeurtenis die veel mensen overkomt. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wat er met de mensen in de recensie is gebeurd, is wat er met mensen in de echte wereld gebeurt. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Factuality In hoeverre ben je het eens met de volgende stellingen?

	Helemaal mee oneens (1)	Oneens (2)	Neutraal (3)	Eens (4)	Helemaal mee eens (5)
De recensie is gebaseerd op feiten. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De recensie toonde iets dat echt is gebeurd. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wat in de recensie werd beschreven, is daadwerkelijk gebeurd. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Involvement De recensie op Trustpilot over NOVITASOL is voor mij...

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
Onaantrekkelijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Aantrekkelijk
Duf	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fascinerend
Waardeloos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Waardevol
Onbetrokken	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Betrokken
Niet nodig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Nodig

End of Block: Involvement

Start of Block: Manipulation check

UserCheck Door wie is deze recensie geschreven?

- ☐ Victor Janssen (1)
- ☐ Vic.Jan3727726J (2)
- ☐ Sop.Maas324 (3)
- ☐ Weet ik niet meer (4)

WarnCheck Bij deze recensie stond een waarschuwing.

- ☐ Nee (1)
- ☐ Ja (2)
- ☐ Weet ik niet meer (3)

WriteCheck Deze recensie was netjes geschreven.

- ☐ Nee (1)
- ☐ Ja (2)
- ☐ Weet ik niet meer (3)

End of Block: Manipulation check

Start of Block: Ending

Openend Je bent hierbij aan het einde gekomen van dit onderzoek. Zodra je op het pijltje rechtsonder in klikt worden je antwoorden opgeslagen.

Bedankt voor je deelname! Mocht je nog vragen of opmerkingen hebben dan kun je dat in onderstaand tekstvak invullen of mailen naar r.e.m.telman@student.utwente.nl.

End of Block: Ending

Appendix D

Table 3.2. Factor analysis

Construct	Item	Component	1	2	3	4	5	6	7	8
Purchase intention	I am considering booking a trip with NOVITASOL based on this review.					.863				
	I plan to spend money on a trip with NOVITASOL based on this review.					.913				
	I want to book a trip with NOVITASOL based on this review.					.921				
	I look forward to booking a trip with NOVITASOL based on this review.					.859				
Attractiveness: I experience the NOVITASOL review shown as:										
	Unattractive-Attractive				.682					
	Not Classy-Classy			.832						
	Ugly-Beautiful			.857						
	Plain-Elegant			.809						
	Not Sexy-Sexy			.739						

Trustworthiness:

I experience the NOVITASOL review shown as:	Undependable- Dependable	
	Dishonest-Honest	.547
	Unreliable-Reliable	.450
	Insincere-Sincere	.526
	Untrustworthy- Trustworthy	.483
Expertise: I experience the NOVITASOL review shown as:	Not Expert-Expert	.769
	Inexperienced- Experienced	.827
	Unknowledgeable- Knowledgeable	.812
	Unqualified- Qualified	.808
	Unskilled-Skilled	.708
Plausibility	The review describes an experience that could potentially happen in real life.	.678
	The experience in the review describes possible real life situations.	.640
	It is unlikely that it actually turned out the way it is described in this review.	.550
	Real people wouldn't do the	.570

	things described in the review.	
Typicality	Not many people will experience the event described in the review.	.511
	The review describes an event that happens to many people.	.609
	What happened to the people in the review is what happens to people in the real world.	.622
Factuality	The review is based on facts.	.689
	The review showed something that actually happened.	.822
	What was described in the review actually happened.	.783
Narrative consistency	The review described a cohesive story.	.743
	The story in the review was consistent.	.814
	The story in the review made sense.	.667
Involvement: The review on Trustpilot about NOVITASOL for me is:	Important - Unimportant	.778

Boring - Interesting	.758
Relevant - Irrelevant	.807
Exciting - Unexciting	.700
Means a lot to me - Means nothing to me	.812
Appealing – Unappealing	.579
Fascinating - Mundane	.633
Valuable - Worthless	.771
Involving – Uninvolving	.749
Needed - Not needed	.772
