MASTER THESIS

VIVA VOCE: ONLINE REVIEWS, VALENCE, AVAILIBILITY OF PERSONAL INFORMATION AND THE MODERATING ROLE OF PRODUCT TYPE

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Enschede, June 2015

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Preface

My study adventure started 7 years ago with my bachelor in Business Administration. After a short break of 1 year I started with the premaster programme and subsequently I started with the master Communication Studies. With this master thesis, ''the crowning glory'', there comes an end to this study period.

I would like to thank a few persons for their help and support during the writing of this master thesis. First, I would like to thank Sabrina Hegner for her guidance, help, support and especially the very quick responses to my questions. I would also like to thank Ardion Beldad for his help and feedback. It has been a pleasant experience to have you both as my supervisor. In addition I would like to thank Juan for the grammar check.

Furthermore I would like to thank my girlfriend, Femke, my parents, Jos and Ine, and my brother, Steven, for their help and support during my study period.

Thank you!

<div style="text-align: right;">Enschede, June 2015</div>

Abstract

Consumers see online reviews as an important instrument in their purchase process. Whereas earlier a consumer's trust was based on advertisements and (product) experts' opinions, nowadays online reviews have taken over this role. Consumers can encourage or discourage fellow consumers from buying a certain product by means of an online review. This means that an online review can be deemed as either positive or negative. Past studies argue that consumers look for evidence in order to assess the credibility of the sender. The presence of reviewers' personal information could play a role here. Valence and availability of personal information are the independent variables in this study. Former studies also indicate that product type is an interesting moderator, experience- and search goods are distinguished in this research. The used variables in this study have not been combined in previous studies; explaining the uniqueness of this study. The research model used in this study is a 2x2x2 within-subjects design. The data was gathered through an online survey. A total of 131 participants participated in the study. The outcomes show that positive online reviews are seen as more credible compared to negative online reviews. Results also show that adding personal information to an online review positively influences the credibility. Personal information consisted of a profile picture, a real person's name, age of the reviewer, residence of the reviewer and the number of written reviews. Finally, outcomes indicate that positive online reviews lead to a higher probability of purchase and a more positive attitude towards the product than negative online reviews do. Conclusively, limitations and suggestions for future research are discussed in this thesis.

Keywords: Online Review valence, Personal Information, Credibility, Purchase intention and Product attitude.

Dutch Abstract

Online reviews worden steeds belangrijker in het aankoop proces van de consument. Voorheen lag het vertrouwen van de consument met name bij reclame uitingen en adviezen van product experts. Deze rol wordt tegenwoordig steeds vaker overgenomen door online reviews. Consumenten kunnen elkaar middels online reviews aanmoedigen of ontmoedigen om een bepaald product te kopen. Dit betekent dat een online review positief of negatief kan zijn. Reeds verrichte onderzoeken tonen aan dat consumenten naar bewijzen zoeken, naast de review zelf, om de geloofwaardigheid hiervan te beoordelen. Deze onderzoeken suggereren dat aanwezigheid van persoonlijke informatie een rol hierin zou kunnen vervullen. Valentie en aanwezigheid van persoonlijke informatie zijn de twee onafhankelijke variabelen in dit onderzoek. Andere reeds uitgevoerde onderzoeken geven aan dat product type een interessante moderator in een onderzoek kan zijn, in dit onderzoek is onderscheidt gemaakt tussen search goederen en experience goederen. Een interessante bijkomstigheid is dat de gecombineerde variabelen niet eerder onderzocht zijn, om hiermee het unieke karakter van dit onderzoek aan te geven. Middels een 2x2x2 onderzoeksdesign is dit vraagstuk onderzocht, data hiervoor is verzameld middels een online vragenlijst. Aan deze vragenlijst hebben 131 participanten deelgenomen. De uitkomsten laten zien dat een positieve online review als geloofwaardiger wordt beschouwd ten opzichte van een negatieve online review. De resultaten laten daarnaast zien dat een online review met de aanwezigheid van persoonlijke informatie als geloofwaardiger wordt beschouwd ten opzichte van een online review zonder persoonlijke informatie. De persoonlijke informatie in dit onderzoek bestond uit; een profiel foto, naam van de reviewer, leeftijd van de reviewer, woonplaats van de reviewer en het aantal geschreven reviews. De bevindingen gaven ook aan dat positieve online reviews leiden tot een hogere aankoopintentie een positievere houding ten opzicht van het product dan dat negatieve reviews doen. Tot slot bevat dit onderzoek ook limitaties en adviezen voor toekomstig onderzoek.

Steekwoorden: *Online Review Valentie, Persoonlijke Informatie, Geloofwaardigheid, Aankoopintentie, Houding Ten Opzichte Van Het Product.*

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1.0 Introduction

Nowadays brands and companies use a variety of marketing channels to reach and convince people about their products and services. In 2013 companies in the Netherlands spent more than 6 billion euro on advertisements (Nielsen, 2013). Companies invest a lot of time and effort in their marketing activities and try to get the most out of it. They decide for themselves what to communicate, where to communicate and how to elicit a positive attitude towards their brand. However, of all marketing channels, there is one marketing medium that cannot be fully controlled: word-of-mouth (WOM). Consumers generally prefer this kind of communication above traditional advertisements. WOM communication often takes place between acquaintances and is therefore perceived as comfortable and more trustworthy. In addition, the sender does not necessarily benefit from the subsequent actions of the receiver (Schiffman et al. 1997).

The rise of the Internet offers consumers more opportunities. One of these opportunities is engaging in electronic word-of-mouth (eWOM). According to Hennig-Thurau (2004) electronic word-of-mouth can be defined as: *Any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet (P. 39).* Consumers increasingly read online product reviews, a specific type of eWOM, before they decide to purchase. These online reviews are often written by an unknown person, which means that it is likely that consumers rely on an unknown source. This is in contrast to WOM, where the source is often a familiar person.

Not knowing anything about the source makes it hard for the consumer to determine the credibility of both the message and the source; consumers see source anonymity as a major drawback to online reviews (Moran & Muzellec, 2014). Making the interaction between the sender and the receiver more interpersonal may therefore positively influence credibility. Kusumasondjaja (2012) mentioned that combining certain attributes with an online review like a real person's name, profile picture and a self-description make a relationship more interpersonal. An interesting question that rises: Is a reviewer with available personal information more credible than a reviewer without available personal information?

EWOM messages can either be positive or negative. These communication directions are defined as valence (Benedicktus et al, 2006). Consumers can encourage their peers to try a certain product by means of writing a positive online review. On the other hand an online review may be valenced negatively. In this case fellow consumers unveil their dissatisfaction about a particular product (Hartman et al, 2013; Huefner et al, 2002). Companies are often not in a position to have any influence over these online reviews. The fact is that consumers decide for themselves what to post (Kusumasondjaja, 2012).

Thus, consumers could write positive online reviews or negative online reviews. However, are consumers really sincere when they write a positive eWOM message or a negative eWOM message? Cognitive dissonance could for instance play a role in posting positive online reviews (Yen & Tang, 2015). A consumer may possibly reduce his feelings of dissonance by placing a positive online review while he or she is not satisfied at all. More precisely, consumers wish to justify and to promote a certain purchase positively by means of writing an online review in order to make themselves feel better.

Consumers could also distribute a very negative online review while the actual product experience was not that negative. It is likely that it is easy to talk badly about a product when consumers are not identifiable. In other words, it is easier to say what you want when personal information is not available (Guadagno et al. 2008). Current research on valence in combination with availability of personal information is still underexplored, which makes it an interesting topic to study.

Online reviews exist for all kinds of products and services. Nelson (1970) mentioned that products can be divided into two categories: search goods and experience goods. This author also mentioned that search goods are products, with characteristics that are easy to evaluate and easy to compare with others products. Product characteristics of experience goods are hard to observe prior to the purchase. These characteristics can be assessed after consumption. Therefore it is expected that purchase processes vary for both search goods and experience goods (Wu & Su, 2002). Several researchers confirm that Nelson's product types are suitable to use as a moderator (Park & Lee, 2009; Hao et al, 2010). A lot of studies focus on these product types (search goods and experience goods). In addition, Lee and Shin (2014) advised for future research to focus again on these two goods but to use other stimuli than they did.

Because of their proven relevance, regarding the eWOM context, this study will focus on three dependent variables: (source) credibility, purchase intention and product attitude (Moran & Muzellec, 2014; Xia & Bechwati, 2008; Wang & Chien, 2012). Credibility plays an important role since consumers need to perceive an online review and the reviewer as trustworthy before following a fellow consumers advise (McKnight et al., 2002). Credibility can simply be defined as "the perceived degree to which an eWOM review provides accurate and trustful information" (Cheung and Thandani, 2012). The construct consists of two components: trustworthiness and expertise (Goldberg and Hartwick, 1990).

The second dependent variable, purchase intention can be defined, as the probability that a certain purchase behaviour will take place (Whitlar, et al. 1993). Consumers often consult online reviews when they look for a certain product, subsequently an online review could influence consumers' purchase intention. Literature indicates that positive eWOM messages result in a higher purchase intention but also lead to a more positive product attitude, which is the third dependent variable (Xia & Bechwati, 2008).

Berwoitz and colleagues (1990) mentioned that attitudes are assessments by people for other people, things or events, which can either be positive or negative (Wang & Chien, 2012). These authors also stated that a credible eWOM message will result in a more favourable attitude and a higher purchase intention. In essence, these three (dependent) variables are very well connected and show coherence in the eWOM context.

Most research on online reviews focus on the content, for instance the quality of a review message (Fan et al. 2013; Cheung & Thadani, 2012). This study differentiates from other research where other items related to an online review are taken into account, like the ones described above. An interesting question that rises is what effects do valence and availability of personal information have on the assessment of an online review for different product types. This lead to the following main research question:

'What effects do valence and availability of a reviewer's personal information, moderated by product type, have on the credibility of an online review, consumer's product attitude, and his or her purchase intention?'

2.0 Theoretical Framework

The goal of this theoretical framework is to provide background information about the topic of this study and to formulate hypotheses according to this information. The following topics will be discussed in the theoretical framework: Introduction to online reviews, valence of online reviews, personal information of the reviewer and product types.

2.1 introduction to online reviews

A shift in consumers' trust has occurred in the last few years from product advertisements and expert opinions towards online peer reviews (Lee et al, 2008). Online reviews are often written from a user perspective, whereas companies focus more on product related information, like for instance specifications (Lackermair et al, 2013). Consumers believe that fellow consumers describe the complete product experience, also the bad ones. They are convinced about the fact that companies are unwilling to do this (Lee et al, 2008). Companies want to expose their activities in a positive light, a negative online review does not contribute to this.

Ba and Pavlou (2002) mentioned that online reviews become more and more important for consumers in their decision making process. Besides that, online reviews are generally easy to understand. EWOM differs in several ways from traditional WOM. First of all, the sender of a message is most of the times unknown to the receiver. This makes it difficult to assess the credibility of an eWOM message. Another important difference is that there are no restrictions on engaging in online reviews, everyone can participate. For instance, when looking for an online review about a certain product, consumers can easily visit a review website and read some reviews about this product. In the offline world it may be hard to find someone who has experience with this particular product. Lastly, online reviews are always accessible; once a message is placed it will not disappear from the web easily (Lee, 2009). Online product or service reviews can be found in several places on the web. They can be posted on, Social Networking sites (e.g. Facebook, Twitter, Google+), e-commerce sites (Bol.com or Wehkamp.nl), discussion forums (Tweakers.net), review websites (Kieskeurig.nl or Beslist.nl) and weblogs (Cheung & Thadani, 2012).

2.2 Valence of Online Reviews

Online reviews can either be of a positive or a negative nature. This is also known as valence. Consumers can encourage other consumers to buy a certain product by means of writing a positive online review. On the other hand, an online review may be valenced negatively. In

this case consumers underline their dissatisfaction with a particular product (Hartman et al, 2013; Huefner et al, 2002).

Skowronski and Carlston (1987) found that people consider negative information as more important compared to positive information when judging something. There are also some specific studies related to information processing, which indicate that the impact of negative reviews outweigh the impact of positive reviews. These studies also pointed out that negative eWOM messages are more trustworthy compared to positive eWOM messages. (Fiske 1980; Kanouse and Hanson 1972; Skowronski and Carlston 1989; Pan and Chiou, 2011).

Fiske (1980) suggested, for instance, that negative information attracts more attention than positive information does. This author showed participants different types of content which varied from very positive to very negative. Results demonstrated that participants looked longer to the negative content than to the positive content. This finding can be explained by the fact that negative information is generally more limited, as a consequence it draws more attention than positive information does (Lee & Koo, 2012).

Pan and Chiou (2011) mentioned that it is possible that positive online reviews are self-serving, this is less likely when it comes to negative online reviews. This implies that consumers possibly write a positive review about a particular product in order to reduce feelings of dissonance or to justify a purchase. Staw (1975) described feelings of dissonance as ''an individual's attempt to demonstrate rationality to others or to prove to others that a costly error was really the correct decision over a longer term perspective''. This citation is an exact description of the role of (reducing) cognitive dissonance in positive online reviews.

Further prior research revealed that consumers consider negative information as more credible since it may help to prevent losses (Lee et al, 2008). An avoided purchase is nowadays not considered as a first world problem. The Internet offers rich information for all kinds of products, which means that that a replacement product can be found soon enough (Highhouse & Paese, 1996). These findings lead to the following hypothesis:

H1a: Consumers perceive negative online reviews as more credible compared to positive online reviews.

Besides the credibility aspect, online reviews could also have an influence on a consumer's purchase intention. Cheng and colleagues (2009) found that credible online reviews are beneficial for a consumer's purchase intention towards the reviewed product. Sparks and Browning (2011) did a study on the effects of online reviews on willingness to book a hotel room, a typical experience good. Results of this study show that a consumer's purchase intention is higher for positive online reviews than for negative online reviews. East and colleagues (2008) focused in their research on the offline environment. They did a research on the impact of positive and negative word-of-mouth on purchase intention. They used a typical search good in their study, namely, a cell phone. Results of this study also show that positive WOM has more influence on a consumer's purchase intention than negative WOM. Positive online reviews probably call positive emotional feelings, which may result in a positive attitude towards the reviewed product and may have a positive boost on a consumer's purchase intention for the reviewed product (Xia & Bechwati, 2008). Therefore, the following hypothesis is predicted:

H1b: Positive online reviews have a more positive influence on a consumer's purchase intention compared to negative online reviews.

Product attitude is the third dependent variable in this study, next to credibility and purchase intention. Lee and colleagues (2012) found that positive online reviews result in a more positive attitude towards the reviewed product and that negative online reviews lead to a more negative attitude. Positive information is related to positive thoughts, which result in positive cognition. Negative information is related to negative thoughts, which result in negative cognition (Pan & Chiou, 2011).

It is expected that consumers search goal-oriented for online reviews that are related to the desired product (Lee et al, 2008). When searched reviews contain mainly positive elements, a more positive consumer's attitude is expected. In contrast to this, a negative eWOM message is expected to lead to a more negative product attitude. Thus, a positive online review may confirm a consumer's feelings of a product which was already positive but may also kickstart in a behavioral change, where initial negative or neutral feelings are weakened, resulting in a positive product attitude (Lee et al, 2012). These findings lead to the following hypothesis:

H1c: Positive online reviews have a more positive influence on consumers' attitude towards the reviewed product compared to negative online reviews.

2.3 Personal information of the reviewer

Traditional WOM usually occurs between people who have strong connections, for example friends or family (Dichter, 1966). Consumers feel comfortable with traditional WOM because of the connection with the sender. EWOM messages can be placed anonymously, because of this the personal relationship between the sender and receiver has disappeared (Chatterjee, 2011). Online review anonymity can be avoided by displaying personal information of the sender (Xie et al, 2011). Personal information of a reviewer may include a real name, profile picture or a social network account. A growing number of online review platforms (e.g. e-commerce sites or review websites) offer consumers the possibility to create an online profile.

Consumers could use profile data of a reviewer to evaluate an eWOM message (Xu, 2014). Xu (2014) also mentioned also that reputation of a reviewer and the availability of a profile picture are considered as most important in the assessment of a reviewer's trustworthiness. Reputation can relate to the amount of written reviews or the worthiness of these messages, for instance when a reviewer gets graded for his or hers written reviews. A profile picture of the reviewer may ensure that reviews are being read more attentively (Lee & Shin, 2014).

Xie and colleagues (2011) made use of the prominence-interpretation theory of Fogg (2002) in their study. This theory suggests that consumers evaluate source credibility based on prominence and interpretation. In this case, the prominence and interpretation of an online review and the related reviewer. Prominence relates to the likelihood of an online profile's element to be noticed, for instance a profile picture. Consumers can identify such an element in order to determine credibility. Interpretation is related to the actual understanding of a particular element. By making use of this theory, research showed that an online review paired with personal information of the source is beneficial for the source's credibility (Xie et al, 2011).

Xie and colleagues (2011) only focused on the hotel branch. It may be interesting to apply this theory to other product types as well. The product types this research focuses on are described in paragraph 2.5. Furthermore, Xie et al. (2011) advised for future research to

focus more on informative descriptives of the source (e.g. reviewers profile pictures or the number of written reviews), in order to measure the credibility. In this study the focus will be on the availability of a reviewer's profile picture, a real name, the number of reviews of the reviewer and place of residence.

Forman and colleagues (2008) found in an article by Jacoby (1994) that consumers look at attributes of an eWOM message in order to reduce feelings of uncertainty. Availability of personal information of a reviewer is such an attribute and contributes to the credibility of an online review. Other studies confirm this point of view (Folkes, 1988; Mizerski et al, 1979).

To sum up, online reviews that are paired with personal information are generally considered as more credible than online reviews that are not paired with personal information. Profile details are used to evaluate a source, while a profile picture is seen as the most important element. In addition to this, revealing personal information leads to a higher sense of reliability and transparency. Conclusively, aspects like personal information will help to ensure that a consumer's feeling of uncertainty decreases. All things taken into account leads to the formulation of the following hypothesis:

H2a: Online reviews with the presence of personal information are perceived as more credible than online reviews without personal information.

Other researchers found that online reviews with the presence of personal information resulted in more valuable eWOM messages and more sales (Forman et al. 2008). Besides online review content, consumer focus on related attributes like personal information of the reviewer. These authors suggest that consumers scan multiple online reviews before proceeding to purchase. In this process personal details of a reviewer are more important than the content of an online review. This could be caused by the fact that available personal information catches the eye and is therefore more crucial than the review itself. This means that personal information gives a sense of reliability, ultimately increasing the value of a message.

Pornpitakpan (2004) mentioned that a well-displayed online product review contributes to a more positive product attitude and a higher purchase intention. A well-

displayed eWOM message does not only contain a well-written review but possibly also information about the writer. Kusumasondjaja (2012) found in an article by Lee and collegues (2000) that an online review containing both aspects is beneficial for a consumer's purchase intention and product attitude. Consumers always look for ways to identify themselves with someone (Kusumasondjaja et al. 2012). Adding personal information is beneficial for this identification process and therefore it is likely that it is beneficial for a consumer's purchase intention.

It is predicted that consumers purchase a certain product based on the advice of a credible reviewer. Consumers will not buy a product when they perceive a fellow consumer's advice as unreliable. Previous research by Xie et al. (2011) indicates that the presence of personal information positively influences the credibility of the online review and the reviewer. This may subsequently lead to a higher purchase intention.

The outcomes of their study confirm this point of view, although the effects on purchase intention were not very strong. The valence intensity in their study was quite neutral. They used moderately positive reviews and moderately negative reviews. It is expected by them that more convincing (extreme) online reviews, either being solely positive or solely negative, result in stronger effects on purchase intention. Almana and Mirza (2013) came to the same finding. The following hypothesis is formulated:

H2b: Online reviews with the presence of personal information lead to a higher purchase intention compared to online reviews without personal information.

A certain behavioural intention like a purchase is often the consequence of a favourable product attitude. A positive product attitude leads to a positive purchase intention, and, a negative product attitude leads to a negative purchase intention (Pornpitakpan, 2002). Since prior studies suggest that availability of personal information may influence a source's credibility, it is assumed that a credible source positively influence a consumer's product attitude. Wang and Chien (2012) confirm this; they imply that a credible eWOM message will result in a more favourable attitude and a higher purchase intention. Reviewers who show personal information give a feeling of expertness of themselves to other consumers. It is likely that an expert's advice will result in a more favourable product attitude. These findings lead to the following hypothesis:

H2c: Consumers have a more positive product attitude towards online reviews with the presence of personal information than online reviews without personal information.

2.4 Personal information and review valence

It is logical to think that consumers could write whatever they want when doing so anonymously. So, the question is, how sincere are negative and positive online reviews without the presence of personal information? Do consumers post the same review when they need to reveal personal information? It is likely that consumers' become more honest and sincere when their personal information is known. It is possible that consumers' do not want to embarrass themselves online when personal information is available. Present research on valence in combination with availability of personal information has not been adequately studied, only one study in the literature focused on this research area.

Xu (2014) conducted a research regarding review valence, availability of a reviewers profile picture and the number of trusted members. This author mentioned that a consumer's profile picture gets more attention when the eWOM message was negative. This phenomenon is explained by the correspondent inference theory of Jones and Davis (1965). Consumers believe that negative eWOM messages are non-normative, therefore, negative eWOM messages need a more careful analysis. This analysis focused on a reviewers profile picture. This was the only personal element of a reviewer that was taken into account in this particular study. The author of this study expects that it is not easy to write something negative online about a certain product or service, since this is seen as non-normative by fellow people. Adding personal information, like a profile picture, may help to make an online review normative.

Xu (2014) found this interaction effect between the profile picture and review valence only for negative online reviews. A positive only review did not necessarily increase in credibility when it contained a picture of the reviewer. Risk-aversion was a second explanation that this author gave for this phenomenon. Participants saw one single negative online review in the authors experiment. As already mentioned, consumers assume that negative online reviews are non-normative. Possibly, consumers ask themselves: Why is this particular online review negative? Attributes related to an online review like, for instance, a profile picture might help to assess the credibility of the review. It is likely that consumers regard attributes that help to evaluate the credibility as desired cues.

As already mentioned in the introduction, Wang and Chien (2012) found that credibility, product attitude and purchase intention are three variables that are closely related to each other in the eWOM context. It suggests that a credible online review leads to a more favourable product attitude and a higher purchase intention. The outcomes of a study by Fan and Miao (2012) demonstrated that a credible online review enhances a consumer's purchase intention. In addition, Purwanto (2012) found in an article from Jianlin and colleagues (2010) a positive link between product attitude and purchase intention. These findings lead to the following hypothesis:

H3: Negative online reviews with the presence of personal information have a more positive effect on a) credibility, b) purchase intention and c) product attitude compared to negative online reviews without personal information, while there is no difference in a) credibility, b) purchase intention and c) product attitude in case of positive online reviews with or without personal information.

2.5 Product types

Consumers nowadays are active online; they place and read reviews of all kind of products and services. Nelson (1970) mentioned that products and services can be divided into two categories: search goods and experience goods. Search goods are products, with characteristics that are easy to evaluate and to compare with others, while product characteristics of experience goods are hard to observe prior the purchase. These product characteristics can only be assessed after consumption.

Sundaram and Webster (1999) mentioned that product characteristics have an influence on how consumers observe an eWOM message. For example, an online review about a holiday destination is perceived differently compared to an online review about a laptop. The quality of a laptop can be assessed easily, this is not possible with a holiday destination. Weinberger and Dillon (1980) found that consumers perceive a WOM message about a product different than a WOM message about a service. This study will focus on the aforementioned product types, which were distinguished by Nelson (1970) in experience goods and search goods. Other studies confirm also that Nelson's product types are interesting to use as moderator due to their different characteristics but also because of their mediating role (Park & Lee, 2009; Hao et al, 2010; Cheng & Zou, 2010).

Huang and colleagues (2009) mentioned that consumers look differently for search goods in comparison with experience goods. These authors found that consumers keep a more active role when they look for experience goods. Their role is more passive when they look for search goods. To be more specific, they found that consumers spent more time on one page (i.e. the page of a website) and scan fewer pages, when it comes to experience goods. For search goods it is the contrary, consumers spent less time on one page and scan multiple pages. These findings imply that product type could play an interesting role in this research.

Park and Lee (2009) suggested that the eWOM effect is more decisive, in a consumer's decision-makings process, for experience goods than for search goods. This may be because product characteristics can only be evaluated after the purchase. According to these authors consumers want to minimize their feelings of uncertainty, especially for experience goods, because consumer do not know the specific product qualities yet. Online reviews, written for experience goods, can communicate certain aspects to the consumer, so he or she has a better understanding of a particular product. Mudambi (2010) supports this statement. This author mentioned that it is challenging and costly to estimate the product quality of experience goods prior the purchase. Product characteristics are subjective or difficult to compare. In this case people need to use their senses in order to evaluate product quality. It is less challenging to acquire information about the quality of a search good. Product characteristics are objective and easy to compare. In this case it is not necessary to use senses to assess product quality.

These differences also show that online reviews, especially for experience goods, can be very important and helpful. Park and Lee (2009) did a study on the moderating role of product types and confirmed that online reviews of experience goods are more credible compared to online reviews about search goods. These authors mentioned that users with a high level of expertise often write eWOM messages about experience goods. This results logically in a more credible online review. It is likely that people base their product attitude on these reviews, partly because, the online review is one of the few things that give them an image of the product.

2.6 Product types and valence

Most of the consumers make use of online reviews in their purchase process. This relates both to experience goods and search goods. However, consumers prefer a different kind of

review for search goods in comparison with experience goods (Mudambi, 2010). According to this author consumers prefer a more extensive online review for search goods, this will contribute to the helpfulness of the review. Mudambi (2010) came to another interesting conclusion; extreme positive or negative eWOM messages for experience goods may be perceived as less credible compared to moderately positive or negative eWOM messages. This extremity was measured based on star ratings. An extremely positive online review contained five stars and an extremely negative contained one star. An online review with five stars can be seen as a hundred percent positive review. An online review with one star can be seen as a hundred percent negative review.

In general, when it is difficult to assess the quality of a product, the value of available information will increase (Bone, 1995). This may especially occur with experience goods. An increase of information value may lead to a higher credibility of the online review (Bone, 1995; Park & Lee, 2009). Scarcity contributes to the effect that consumers probably rely on available information because this is the only piece of information that is available. In short, it can be said that when it is hard to obtain product information or when information is scarce, available information will increase in value and is perceived as credible.

Online reviews for experience goods are seen as more essential in comparison with online reviews for search goods, product information for these experience goods is harder to evaluate than product information of search goods. In addition, people consider negative information as more important compared to positive information when they judge something (Skowronski & Carlston, 1987). It is likely that positive online reviews of search goods contain a higher level of credibility. Experience goods contain a certain degree of subjectivity, everyone can think differently about such a good. This is less the case for search goods; product characteristics of these goods are often fixed. Take, for instance, a digital camera, the number of megapixels of this camera can be found in the technical specifications. It is expected that a positive online review will reinforce a consumer's opinion towards a certain product when the characteristics are already perceived as positive. Besides that, online reviews about search goods are also controllable. Imagine that a certain person posts positive comments about a camera's megapixels. Consumer could subsequently control these comments, given the fact that product characteristics are already known. If a written review correspondent with already known product

characteristics, the review would become more credible. The following hypothesis is formulated:

H4a: Negative online reviews of experience goods have a more positive effect on a) credibility, b) purchase intention and c) product attitude compared to negative online reviews of search goods while positive online reviews of search goods have a more positive effect on a) credibility, b) purchase intention and c) product attitude than positive online reviews of experience goods.

2.7 Product type and personal information

The credibility of reviews plays an important role in a consumer's buying process. Wether the search is aimed at a search good or an experience good does not matter. Information about experience goods is often scarcer compared to information about search goods, which is generally in abundance. Therefore it is more important that available information of an experience good, which could be an online review, contains a high level of credibility. Because information of search goods is sufficiently available it is more likely that this includes also sufficient credible information. Credibility of an online review about an experience good may increase by placing personal information alongside an online review. Xie and colleagues (2011) confirmed this in their research. These authors focused their study on the hotel industry, a typical experience good, and came to the conclusion that availability of personal information contributes positively to the level of credibility of the eWOM message. This leads to the formulation of the last hypothesis:

H4b: Online reviews with the presence of personal information have a more positive effect on a) credibility, b) purchase intention and c) product attitude for experience goods compared to a) credibility, b) purchase intention and c) product attitude for search goods, while there is no difference in a) credibility, b) purchase intention and c) product attitude in case of no personal information for search goods and for experience goods.

2.8 Conceptual model and research question

Figure 1. shows the conceptual model. This model consists of two independent variables, one moderator and one dependent variable. This 2x2x2 design will be used to answer the main research question.

'What effects do valence and availability of a reviewer's personal information, moderated by product type, have on the credibility of an online review, consumer's product attitude, and his or her purchase intention?'
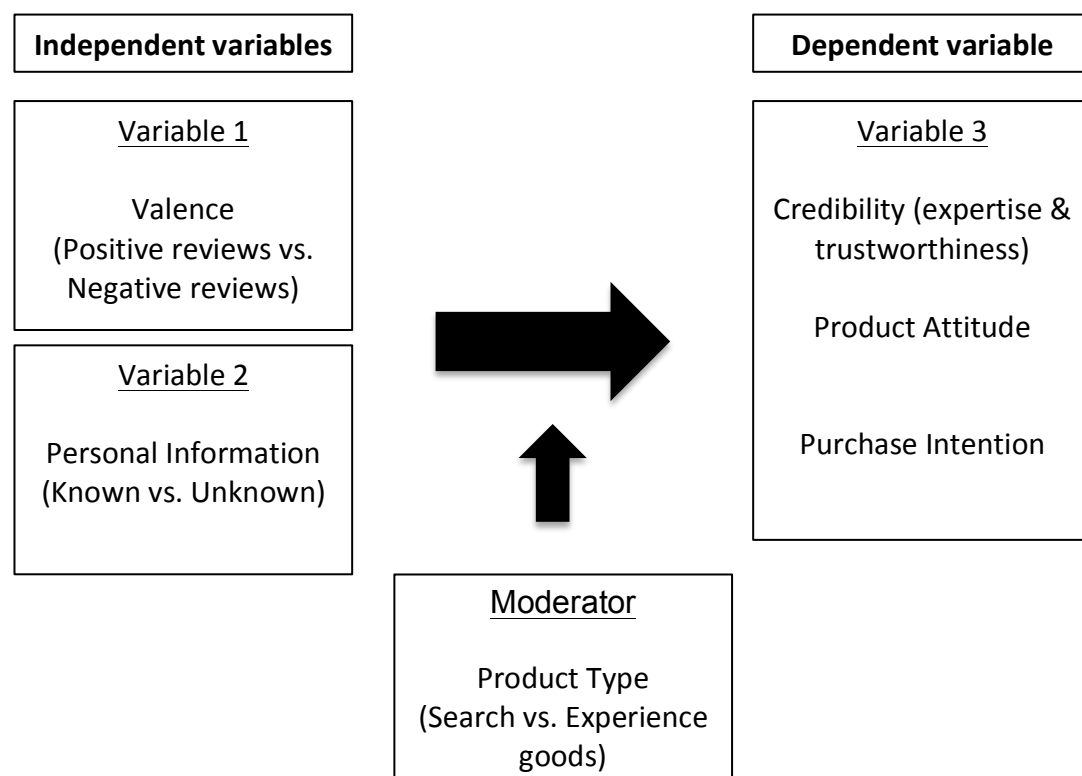

Independent variables

Variable 1

Valence
(Positive reviews vs. Negative reviews)

Variable 2

Personal Information
(Known vs. Unknown)

Moderator

Product Type
(Search vs. Experience goods)

Dependent variable

Variable 3

Credibility (expertise & trustworthiness)

Product Attitude

Purchase Intention

Figure 1. Conceptual model

3.0 Method

The method and measures are described in this chapter. Paragraph 3.1 contains the design and the procedure is explained in section 3.2. The materials are described in paragraph 3.3 and the participants are described in the fourth section.

3.1 Design

The research question, conceptual model and related hypotheses were tested by means of a 2 (valence: positive vs. negative) x 2 (personal information: known vs. unknown) x 2 (product type: search vs. experience goods) design. The study focused on the effects of the previously mentioned independent variables on the dependent variables: credibility, product attitude and purchase intention.

3.2 Procedure

This research was conducted by means of an online survey. A within-subjects design was chosen for this experiment, meaning that each respondent was shown 2 conditions. One of the advantages of such a design is that it does not require many respondents. It was foreseen that collecting data could be difficult. The choice of this research design was therefore a strategic one. In making this decision however, the disadvantages, like the carryover effects, were taken into consideration. Table 1. gives an overview of the conditions presented to the participants. Everyone who participated in this study was randomly assigned to one of these four conditions. All conditions were exactly the opposite of each other, which is also visible in table 1.

Condition	N		N	
1	34	Positive online review / experience good / with personal information	33	Negative online review / search good / without personal information
2	31	Positive online review / experience good / without personal information	32	Negative online review / search good / with personal information
3	35	Negative online review / experience good / with personal information	34	Positive online review / search good/ without personal information
4	36	Negative online review / experience good / without personal information	35	Positive online review / search good / with personal information

Table 1. Research conditions

The positive online review contained a positive statement about a particular product; the negative online review contained a negative statement about a certain product.

Another difference was the visibility of personal information of the reviewer. Personal information consisted of a real name, profile picture, city, age of the reviewer and the number of written reviews. Xie and colleagues (2011) advised for future research to focus on these elements. When there was no personal information available respondents only saw a nickname and an avatar. Two different products were used for the online reviews, namely an anti-virus program and a perfume. A pre-test showed these two products to be most suitable for this study. Insights in the pre-test follow in the next paragraph.

3.3 Pre-test product types

A pre-test for the product types, experience- and search goods, was executed in order to ensure that participants perceive the products as different in nature (Bae and Lee, 2011). For this study it was important that participants perceive a product as search good or as an experience good. To identify this the following questions were asked to the participants (Weathers, Sharma, and Wood 2007). Three questions focused on experience qualities and two questions concentrated on search qualities. The pre-test questions were formulated in Dutch.

Experience Qualities

1. It is important for me to see this product to evaluate how well it will perform.
2. It is important for me to touch this product to evaluate how well it will perform.
3. It is important for me to test this product to evaluate how well it will perform.

Search Qualities

4. I can adequately evaluate this product using only information about the product's attributes and features provided by the retailer or the manufacturer.
5. I can evaluate the quality of this product simply by reading information about the product.

Participants could response based on a 7-point Likert scale, with answer possibilities ranging from 'Totally disagree' to 'Totally agree'. These questions were asked for twelve products shown in table 2. Price level and involvement is taken as a starting point for the selection of these goods. Not all goods are comparable in price and involvement, but when matching different goods separately it will be. For instance, a bicycle and a cell phone could contain an equal price- and involvement level, the same is true for perfume and shoes.

The selected products were shown randomly, in order to avoid order bias. The author of the present study proposed the following results.

Experience goods	Search goods
Mattress	Refrigerator
Perfume	Shoes
Computer Game	Anti-virus Program
Sunglasses	Digital Camera
Bicycle	Cell Phone
Book (study)	Coffee Machine

Table 2. Product types pre-test

A total of 24 respondents participated in the pre-test. Twenty-one of these were male and three were female. Participants were between the ages of twenty-two and sixty-one. The mean age was M=27.71.

	Search mean	Experience mean	Mean difference
Perfume	2.60	5.28	-2.68
Sunglasses	3.31	5.86	-2.55
Shoes	3.52	5.81	-2.29
Mattress	4.19	5.96	-1.77
Bicycle	4.54	5.94	-1.40
Cell Phone	6.00	5.94	0.06
Digital Camera	5.46	5.19	0.27
Studybook	4.54	4.00	0.54
Coffee Machine	5.25	4.26	0.99
Refrigerator	5.54	4.42	1.12
Computer game	4.88	3.69	1.19
Antivirus program	5.42	3.88	1.54

Table 3. Results pre-test

Results of this pre-test indicated that the antivirus program is most suitable as search good and perfume as experience good.

3.4 Participants

Participants for this study were mainly recruited through a Facebook group, called 'Respondenten gezocht', which consisted largely of students from universities or colleges in the Netherlands. Other respondents were recruited at the internship of the author. Family and friends completed the online questionnaire as well. This resulted in a total of 131 participants of which 67 were male and 64 female. The age of the participants varied from 18 to 68, with a mean age of 33.4 and a standard deviation of 14.24.

Gender	N	%	Level of education	N	%
Male	67	51.1%	No education	2	1.5%
Female	64	48.9%	Lagere school/basisonderwijs	1	0.8%
			LBO, VBO, LTS, LHNO, VMBO	1	0.8%
Age	Mean		MBO, MTS, MEAO	15	11.5%
Male	33.63		HAVO, VWO, Gymnasium	5	3.8%
Female	33.17		HBO, HEAO, PABO, HTS	53	40.5%
			University	54	41.2%

Table 4. Demographics

3.5 Scales

The dependent variables, credibility, purchase intention and product attitude were measured by means of existing scales.

The two elements of source credibility, trustworthiness and expertise were measured by means of a 5-point bipolar scale, developed by Ohanian (1990). The trustworthiness construct contained the following items, do you think this online review is dependable/undependable, honest/dishonest, reliable/unreliable, sincere/insincere and trustworthy/untrustworthy. The expertise scale consisted of the subsequent items, do you think the reviewer is expert/not an expert, experienced/inexperienced, knowledgeable/unknowledgeable, qualified/unqualified and skilled/unskilled.

Purchase intention was measured using a 7-point Likert scale ranging from 1 = totally disagree to 7 = totally agree (Baker et al, 1977). The construct was measured using five statements: 'After reading the online review, it makes me desire to buy the product, 'I will consider buying the product after I read the online review, ' I intend to try the product discussed in the online review', 'In the future, I intend to seek out the product discussed in the online review' and In the future, I intend to buy the product discussed in the online review'.

Product attitude was measured by means of a 5-point bipolar scale, developed by Matthes, Schemer and Wirth (2007). The construct was measured with five items: friendly/unfriendly, positive/negative, appealing/not appealing, interesting/uninteresting and attractive/unattractive.

Construct	Items (N)	α	M	SD
Credibility				
Trustworthiness	5	0.910	1.69	0.53
Expertise	5	0.899	1.97	0.50
Purchase intention	5	0.939	2.07	0.89
Product attitude	5	0.944	1.85	0.61

Table 5. Cronbach alpha's dependent variables

4.0 Results

The results of this study are described in this chapter. The first section contains an overview of the eight conditions used in this study. The second Paragraph contains an univariate analysis of variance of the independent variables in combination with the dependent variables.

4.1 Descriptive

	Experience Goods								Search Goods							
	Positive online review				Negative online review				Positive online review				Negative online review			
	With personal information		Without personal information		With personal information		Without personal information		With personal information		Without personal information		With personal information		Without personal information	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Credibility																
Trustworthiness	3.20	0.72	3.32	0.81	3.61	0.64	3.34	0.77	3.43	0.87	3.08	0.93	3.42	0.94	2.88	0.89
Expertise	2.97	0.76	3.08	0.77	2.92	0.67	2.42	0.92	3.22	0.68	2.64	0.77	3.01	0.83	2.52	0.67
Product attitude	3.49	0.77	3.92	0.64	2.58	0.63	2.84	0.99	3.39	0.92	3.44	0.83	2.30	0.76	2.28	0.75
Purchase intention	3.84	1.55	3.52	1.39	3.06	1.21	3.04	1.06	3.97	1.53	3.97	1.32	2.41	1.38	2.63	1.12

Table 6. Means and standard deviations

4.2 Univariate analysis of variance

The Univariate analysis of variance was conducted for the four dependent variables: trustworthiness, expertise, purchase intention and product attitude. The results for each dependent variable can be found in the table listed below. The significant effects are made bold and the marginally significant effects are in Italic.

Independent variable	Trustworthiness			Expertise			Purchase intention			Product attitude		
	Sum of squares	F	Sig.	Sum of squares	F	Sig.	Sum of squares	F	Sig.	Sum of squares	F	Sig.
Product type	1.80	2.626	0.11	9.02	0.00	0.99	0.90	0.515	0.47	**8.15**	**12.839**	**0.000**
Valence	0.21	0.307	0.58	**4.48**	**7.696**	**0.006***	**71.18**	**40.335**	**0.000***	**73.47**	**115.733**	**0.000***
Information	**4.36**	**6.371**	**0.012***	**8.59**	**14.754**	**0.000***	0.06	0.035	0.85	*2.12*	*3.348*	*0.068*
Product type * valence	1.70	2.487	0.12	0.56	0.965	0.33	**10.74**	**6.087**	**0.014***	0.27	0.426	0.52
Product type * information	*2.29*	*3.349*	*0.068*	*1.90*	*3.269*	*0.072*	1.26	0.714	0.40	*1.79*	*2.822*	*0.094*
Valence * information	1.42	2.081	0.15	0.99	1.700	0.19	1.09	0.621	0.43	0.28	0.449	0.50
Product type * valence * information	0.18	0.262	0.61	*2.04*	*3.515*	*0.062*	0.02	0.016	0.90	0.04	0.072	0.79

Table 7. Univariate analysis of variance

4.2.1. Main effects

4.2.1.1 Valence

Trustworthiness - No significance was found for valence on trustworthiness ($F_{(1, 254)} = .307$, $P = 0.580$). Positive- (M = 3.26, SD = .84) and negative (M = 3.32, SD = .85) online reviews did not have an influence on trustworthiness.

Expertise - The table shows a significant main effect for valence on expertise ($F_{(1,254)} = 7.696$, $P = .006$). Participants who saw a positive online review believe that the reviewer has more expertise (M = 2.98, SD = .77) compared to a reviewer who wrote a negative online review (M = 2.71, SD = .81). This indicates that Hypotheses 1a can be rejected. This hypothesis was formulated as follow: Consumers perceive negative online reviews as more credible compared to positive online reviews. There is no statistical evidence that consumers perceive negative reviews as more credible compared to positive online reviews. Trustworthiness and expertise are two elements, which measure together credibility. Trustworthiness was found non-significant and expertise was the other way around, positive online reviews contained a higher level of expertise compared to negative online reviews.

Purchase intention - The results show that a significant main effect is visible for valence on purchase intention ($F_{(1, 254)} = 40.335$, $P = .000$). Positive online reviews result in a higher purchase intention (M = 3.84, SD = 1.45) compared to negative online reviews (M = 2.80, SD = 1.21). This confirms hypothesis 1b, positive online reviews have a more positive influence on a consumer's purchase intention compared to negative online reviews.

Product attitude - The last dependent variable relates to product attitude. The outcomes show a significant main effect between valence and product attitude ($F_{(1, 254)} = 115.733$, $P = .000$). A positive online review leads to a positive product attitude (M = 3.56, SD = .82), whereas a negative online review results more in a negative product attitude (M = 2.51, SD = .82). These findings support hypotheses 1c, positive online reviews lead to a more positive attitude towards the reviewed product whereas a negative online review leads to a more negative attitude.

4.2.1.2 Personal information

Trustworthiness - The results present a significant main effect for availability of personal information on trustworthiness ($F(1, 254) = 6.371$, P = .012). This means that online reviews with the presence of personal information are more trustworthy (M = 3.42, SD = .81) than online reviews without personal information (M = 3.16, SD = .87).

Expertise - The results also show a significant main effect for availability of personal information on expertise ($F(1, 254) = 14.754$, P = .000). This means that participants also believe that when personal information is visible a reviewer has more expertise (M = 3.04, SD = .74). A reviewer has less expertise when personal information is not visible (M = 2.66, SD = .82). The results of expertise and trustworthiness demonstrate both that availability of personal information has a positive influence on the credibility of a source. Hypotheses 2a, online reviews with the presence of personal information are perceived as more credible compared to online reviews without personal information, is supported.

Purchase intention - The main effect of the availability of personal information on purchase intention was found to be non-significant ($F(1, 254) = .035$, P = .852). Online reviews with personal information (M = 3.35, SD = 1.54) have a somewhat higher purchase intention compared to online reviews without personal information (M = 3.29, SD = 1.31). However, there is no statistical evidence that supports hypotheses 2b, online reviews with the presence of personal information lead to a higher purchase intention compared to online reviews without personal information.

Product attitude - There is a marginally significant effect for availability of personal information on product attitude ($F(1, 254) = 3.348$, P = .068). Participants had a more positive product attitude towards online reviews without personal information (M = 3.11, SD = 1.01) than online reviews with personal information (M = 2.96, SD = .92). Hypotheses 2c, Consumers have a more positive product attitude towards an online product review with the presence of personal information than an online product review without personal information, is thus not supported.

4.2.1.3 Product type

Trustworthiness - No significance was found for product type on trustworthiness (F(1, 254) = 2.626, P = .106). Both products, the search good (M = 3.21, SD = .93) and experience good (M = 3.37, SD = .75) did not have a significant influence on trustworthiness.

Expertise - The main effect for product type on expertise was also non-significant (F(1, 254) = 0.00, P = .990). This means that the level of expertise is not affected by either a search good (M = 2.85, SD = .78) or an experience good (M = 2.85, SD = .82).

Purchase intention - The third main effect for product type on purchase intention was also non-significant (F(1, 254) = .515, P = .474). For both search goods (M = 3.27, SD = 1,52) and experience good (M = 3.36, SD = 1.34) is the purchase intention almost equal.

Product attitude - In contrast to the other variables is for product type on product attitude a significant main effect visible (F(1, 254) = 12.839, P = .000). Participants have a more positive attitude towards the experience good (M = 3.20, SD = .93) than to the search good (M = 2.87, SD = .99).

4.2.2 Interaction effects

4.2.2.1 Valence and personal information

Trustworthiness - The interaction effect of valence and personal information on trustworthiness (F(1, 254) = 2.081, P = .150) was found non-significant.

Expertise - The same was true for valence and availability of personal information on expertise (F(1, 254) = 1.700, P = .194). This implies that hypotheses 3 will be rejected, since valence and availability of personal information are non-significant for both trustworthiness and expertise, which are two elements of credibility. This hypothesis was described as follow: Negative online reviews with the presence of personal information have a more positive effect on a) credibility, b) purchase intention and c) product attitude compared to negative online reviews without personal information while there is no difference in a) credibility, b) purchase intention and c) product attitude in case of positive online reviews with or without personal information.

Purchase intention - Valence and availability of personal information on purchase intention was found non-significant (F(1, 254) = .621, P = .431). This means that the hypothesis is also not supported for purchase intention.

Product attitude - Valence and availability of personal information on product attitude (F(1, 254) = .449, P = .503) was also found as non-significant. This means that the hypothesis is also not supported for product attitude.

4.2.2.2 Product type and valence

Trustworthiness - The interaction effect of product type and valence on trustworthiness (F(1, 254) = 2.487, P = .116) was found non-significant.

Expertise – The same applies to the interaction effect of product type and valence on expertise which was also found non-significant (F(1, 254) = .956, P = .327). This indicates that hypotheses 4a; Negative online reviews of experience goods have a more positive effect on a) credibility, b) purchase intention and c) product attitude compared to negative online reviews of search goods while positive online reviews of search goods have a more positive effect on a) credibility, b) purchase intention and c) product attitude than positive online reviews of experience goods, will be rejected. Taking into account that product type and valence were also non-significant for both trustworthiness and expertise.

Purchase intention - There is a clear interaction effect visible for product type and valence on purchase intention (F(1, 254) = 6.087, P = .014). Figure 1 shows this interaction effect in a plot. The plot indicates that for both experience goods and search goods a positive online review results in a higher purchase intention. A negative online review leads to a lower purchase intention. However, search goods have a higher purchase intention (M = 3.98, SD = 1.32) compared to experience goods (M = 3.69, SD = 1.47), when the review is positive. The opposite occurs when the review is negative. In this case the experience good (M = 3.05, SD = 1.13) has a higher purchase intention compared to the search good (M = 2.53, SD = 1.25). This indicates that hypotheses 4a is accepted for the purchase intention variable.
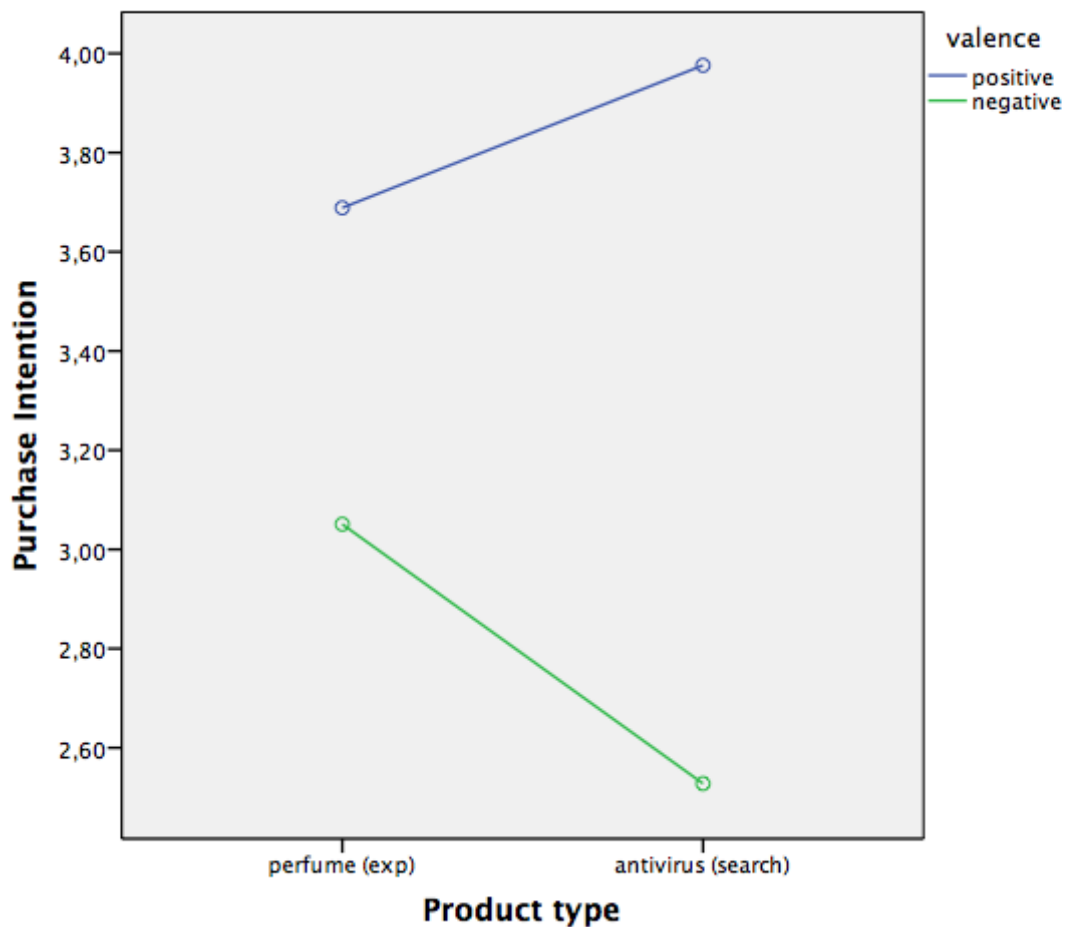
Figure 2. Product type and valence on purchase intention

Product attitude - The other displayed interaction effect, product type and valence on product attitude (F(1, 254) = .426, P = .515), was non-significant. This means that the hypothesis is not supported for product attitude.

4.2.2.3 Personal information and product type

Trustworthiness - The results show a marginally significant interaction effect of product type and availability of personal information on trustworthiness (F(1, 254) = 3.349, P = .068). Participants who saw an online review of a search good (antivirus program) with personal information (M = 3.43, SD = .90) perceived the review as more trustworthy compared to participants who saw the same review without personal information (M = 2.98, SD = .91). Participants who saw an online review of an experience good (perfume) perceived the review in both situations, with personal information (M = 3.41, SD = .71) and without personal information (M = 3.34, SD = .78) as trustworthy.
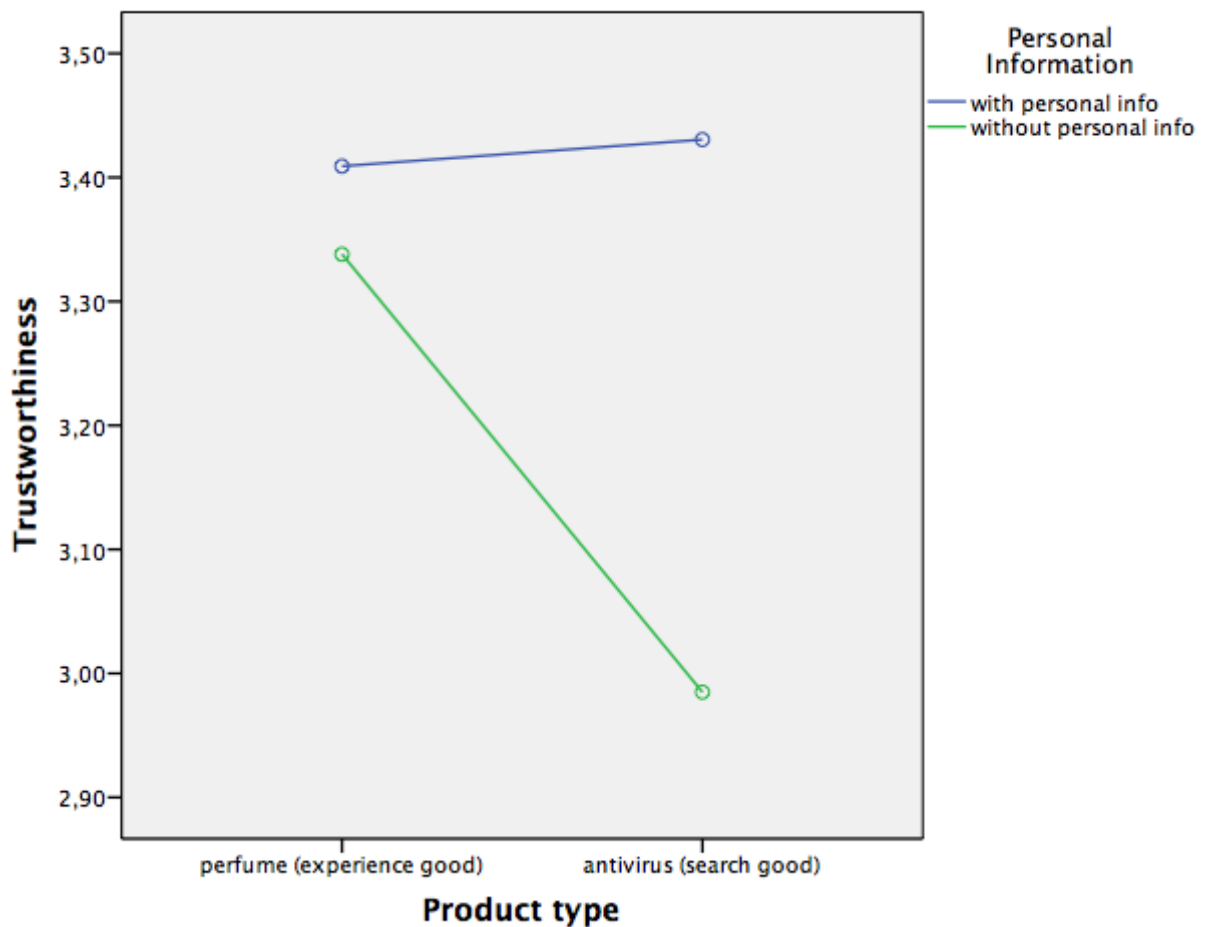
Figure 3. Product type and personal information on trustworthiness

Expertise - There is a marginally significant effect for product type and availability of personal information on expertise ($F_{(1, 254)} = 3.269$, $P = .072$). Availability of personal information has a more positive impact on a reviewer's expertise by search goods ($M = 3.12$, $SD = .75$) than by experience goods ($M = 2.94$, $SD = .71$). The level of expertise decreases considerably for search goods when personal information of the reviewer is not presented ($M = 2.58$, $SD = .72$). For experience goods is this less the case ($M = 2.74$, $SD = .91$). Result of this effect is that hypotheses 4b; Online reviews with the presence of personal information have a more positive effect on a) credibility, b) purchase intention and c) product attitude for experience goods compared to a) credibility, b) purchase intention and c) product attitude for search goods while there is no difference in a) credibility, b) purchase intention and c) product attitude in case of no personal information for search goods and for experience goods, will be rejected, since product type and availability of personal

information are non-significant for both trustworthiness and expertise, which are the two elements of credibility.
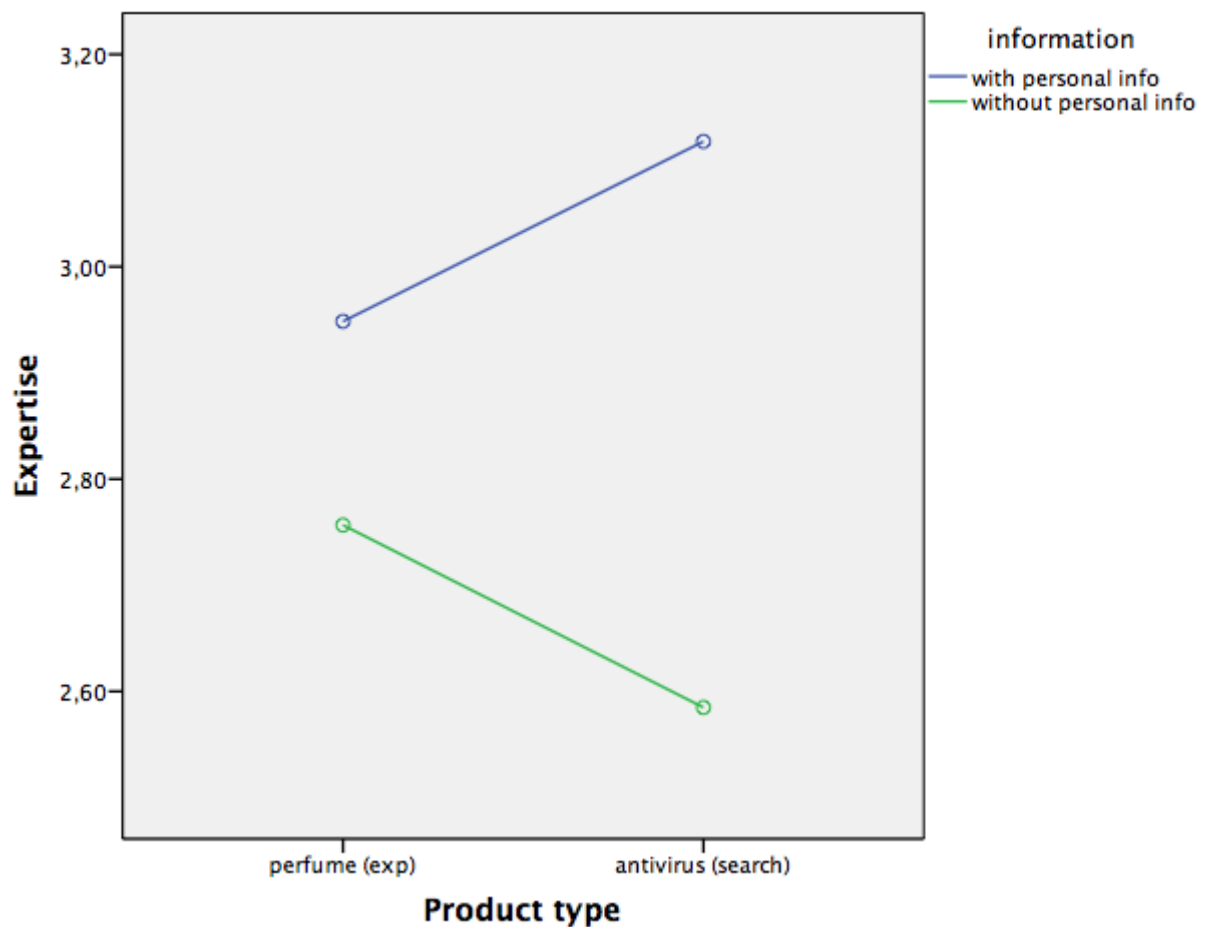
Figure 4. Product type and personal information on expertise

Purchase intention - The other interaction effect for product type and availability of personal information on purchase intention was found non-significant ($F_{(1, 254)}$ = .714, P = .399). This means that the hypothesis is also not supported for purchase intention.

Product attitude - A marginally significant interaction was found for product type and availability of personal information on product attitude ($F_{(1, 254)}$ = 2.822, P = .094). Participants had the most positive product attitude towards the experience good without personal information (M = 3.36, SD = .99). The product attitude for an experience good with personal information (M = 3.04, SD = .84) was higher than the product attitude for a search good both with- (M = 2.87, SD = 1.00) or without personal information (M = 2.87, SD = .97). This means that the hypothesis is also not supported for product attitude.
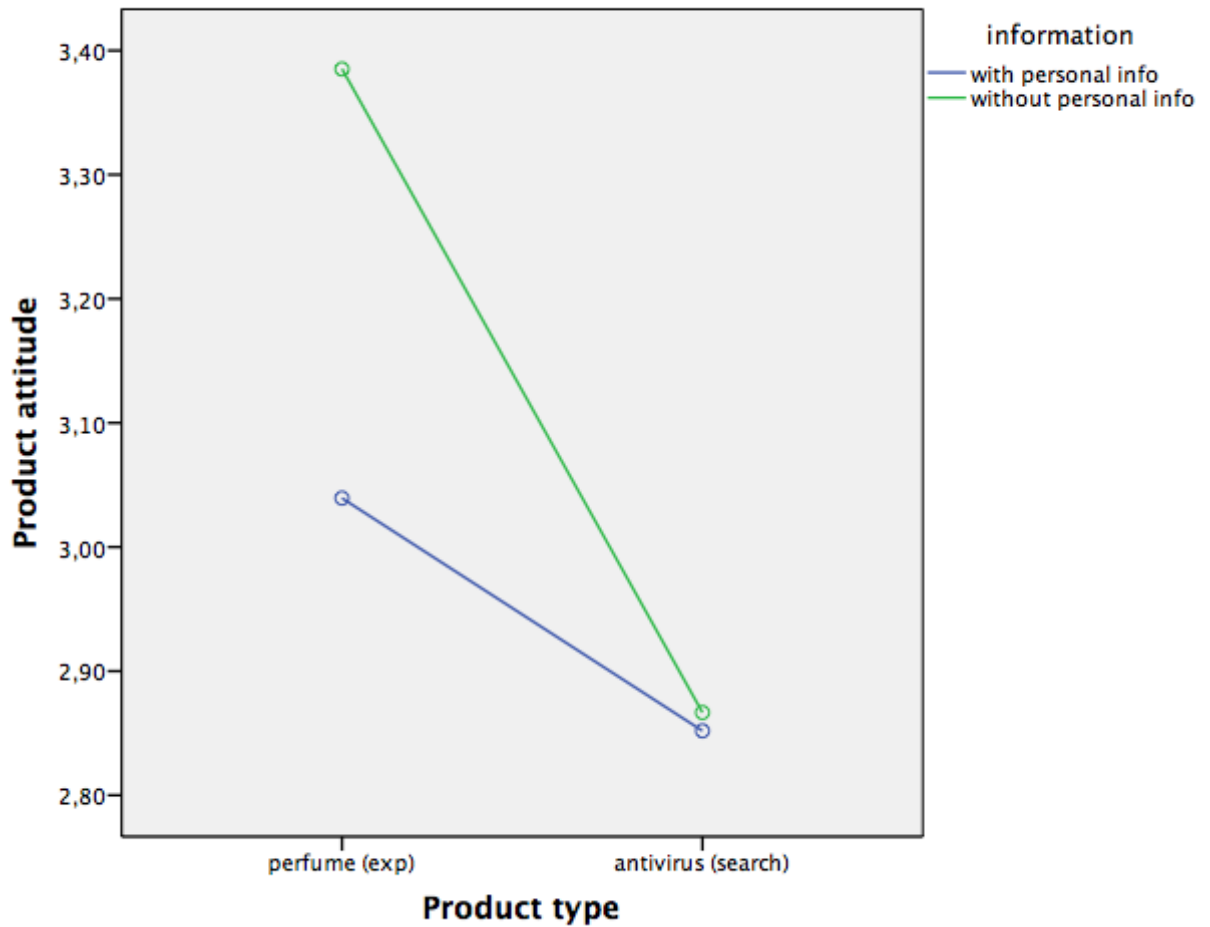
Figure 5. Product type and personal information on product attitude

4.2.2.4 Personal information, product type and valence

Trustworthiness - The interaction effect of product type, valence and information on trustworthiness (F(1, 254) = .262, P = .609) was found non-significant.

Expertise - There is a marginally significant interaction effect for product type, valence and availability of personal information on expertise (F(1, 254) = 3.515, P = .062). Participants believed that a writer of a positive review about a search good and who also reveals personal information of himself has the highest level of expertise (M = 3.23, SD = .68). The level of expertise is also high by a negative review about a search good with the presence of personal information (M = 3.01, SD = .83). The level of expertise for search good decreases when personal information is not available. The decrease for a negative review (M = 2.53, SD = .67) is stronger than for a positive review (M = 2.64, SD = .77). Participants

admitted that the level of expertise for a positive review about an experience good is lower when personal information is visible (M = 2.98, SD = .77). The level of expertise for the same review is higher when personal information is not divulged (M = 3.08, SD = .77). The opposite is the case for negative reviews about experience goods. The level of expertise is higher when personal information is available (M = 2.92, SD = .67) and lower when personal information is not available (M =2.43, SD = .92).
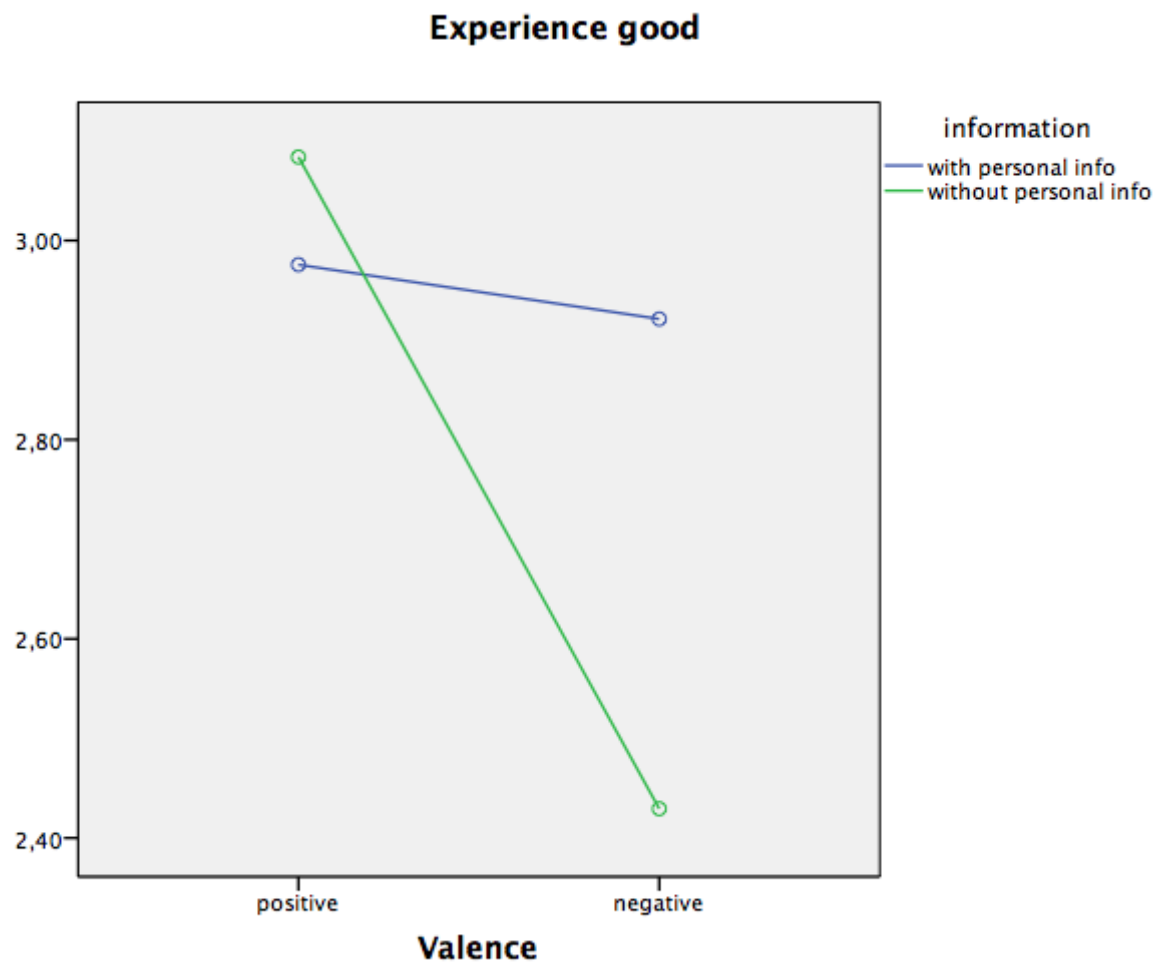
Figure 6. Product type, valence and personal information on expertise (credibility)

Search good
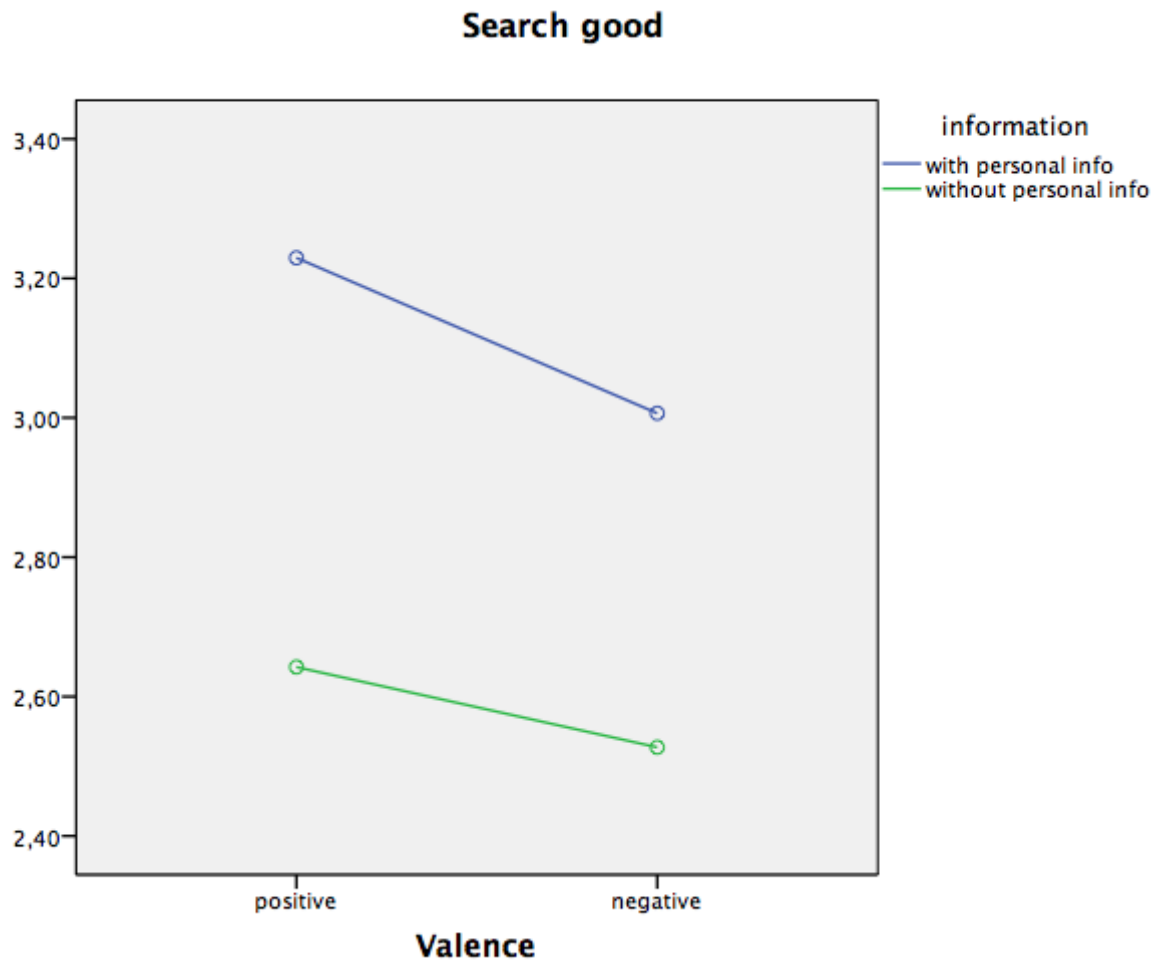
Figure 7. Product type, valence and personal information on expertise (credibility)

Purchase intention - The interaction effect for product type, valence and availability of personal information on purchase intention (F(1, 254) = .016, P = .900) was found non-significant.

Product attitude - The interaction effect for product type, valence and availability of personal information on product attitude (F(1, 254) = .072, P = .789) was also found non-significant.

4.3 Overview of un/supported hypothesis

This paragraph contains an overview of the accepted and unaccepted hypothesis.

Hypothesis		Supported
H1a	*Consumers perceive negative online reviews as more credible compared to positive online reviews.*	No
H1b	*Positive online reviews have a more positive influence on a consumer's purchase intention compared to negative online reviews.*	Yes
H1c	*Positive online reviews lead to a more positive attitude toward the reviewed product whereas a negative online review leads to a more negative attitude.*	Yes
H2a	*Online reviews with the presence of personal information are perceived as more credible than online reviews without personal information.*	Yes
H2b	*Online reviews with the presence of personal information lead to a higher purchase intention compared to online reviews without personal information.*	No
H2c	*Consumers' have a more positive product attitude towards an online product review with the presence of personal information than an online product review without personal information.*	No
H3	*Negative online reviews with the presence of personal information have a more positive effect on a) credibility, b) purchase intention and c) product attitude compared to negative online reviews without personal information, while there is no difference in a) credibility, b) purchase intention and c) product attitude in case of positive online reviews with or without personal information.*	No*
H4a	*Negative online reviews of experience goods have a more positive effect on a) credibility, b) purchase intention and c) product attitude compared to negative online reviews of search goods while positive online reviews of search goods have a more positive effect on a) credibility, b) purchase intention and c) product attitude than positive online reviews of experience goods.*	No*
H4b	*Online reviews with the presence of personal information have a more positive effect on a) credibility, b) purchase intention and c) product attitude for experience goods compared to a) credibility, b) purchase intention and c) product attitude for search goods, while there is no difference in a) credibility, b) purchase intention and c) product attitude in case of no personal information for search goods and for experience goods.*	No*

Table 11. Accepted and unaccepted hypothesis
*Some hypothesis are partly supported, this is explained in greater detail in the discussion section.

5.0 Discussion & Conclusions

The aim of this study was to test, by means of an experimental research, the formulated hypotheses and to find an answer on the main research question:

'What effects do valence and availability of a reviewer's personal information, moderated by product type, have on the credibility of an online review, consumer's product attitude, and his or her purchase intention?'

The effects were tested by means of a 2 (valence: positive vs. negative) x 2 (personal information: known vs. unknown) x 2 (product type: search vs. experience goods) design. Research has been done on the influence of these independent variables on the dependent variables; credibility, product attitude and purchase intention. This chapter provides a discussion of the results, limitations and recommendations for future research.

5.1 Main effects

5.1.1. Valence

Valence relates to the communication direction, in this study being either negative online reviews or positive online reviews. A positive online review illustrates someone's satisfaction with a particular product or service and a negative online review may declare someone's dissatisfaction. From previous studies was derived that negative online reviews are seen as more trustworthy compared to positive online reviews. Negative information is considered as more influential compared to positive information besides that negative information attracts also more attention (Fiske, 1980; Skowronski & Carlston, 1987).

Hypothesized was that it is likely that negative online reviews are more credible than positive online reviews. Negative online reviews are often not self-serving and besides that, negative online reviews may help to prevent losses, like, preventing consumers from a bad purchase. The formulated hypothesis is not supported in this study. Trustworthiness and expertise were used to measure the credibility of an eWOM message. Valence on trustworthiness showed no significance and valence on expertise showed opposite results. More specific, participants believed that positive online reviews contain more expertise than negative online reviews. These results are inconsistent with outcomes of previous studies (Fiske 1980; Kanouse and Hanson 1972; Skowronski and Carlston 1989; Pan and Chiou, 2011).

A plausible explanation for this inconsistency is that the positive review is perceived as extremely positive and the negative review as extremely negative. An extremely positive online review can be described as a hundred percent positive review. An extremely negative online review can be described as a hundred percent negative review. The online reviews in this study were hundred percent negative and hundred percent positive. Lee and colleagues (2009) confirmed that extremity has an influence on the credibility of an online review. Consumers may have their doubts about an eWOM message when this message focus is solely on the positive aspects or the negative aspects of a product. Consumers will understand that it is likely that a certain product always has pros and cons. So, a solely positive- or negative eWOM message is perceived as incredible (Hartman et al, 2013). In this case, the negative online review was possibly too negative. People could think that the only purpose of the reviewer was to damage the product or brand. It is likely that extremely negative online reviews are not beneficial for a source's and review's credibility.

It was found in the theory that valence of online reviews could also have an influence on a consumer's purchase intention and product attitude (Xia & Bechwati, 2008). For both cases it was hypothesized that positive eWOM messages have a positive influence on either purchase intention and product attitude. Results of this study support this proposition. Consumers keep a positive flow, which subsequently positively influences a consumers purchase intention and product attitude. It is supposed, that consumers search goal-oriented for eWOM messages that are related to a desired product (Lee et al, 2008). So, it is expected that consumers already have a preference for a particular product. Reading a positive online review could confirm a consumers positive feelings regarding the product. This results in a positive product attitude and may have a positive influence on a consumer's purchase intention (Xia & Bechwati, 2008).

5.1.2. Personal information

In contrast to WOM, where consumers (personally) know the sender of a message, eWOM often does not provide personal information of the sender. This study focused on the availability of a reviewers profile picture, a real name, the number of reviews of the reviewer and place of residence, which was advised by Xie and colleagues (2011). These authors suggested that presence of personal information provided next to an online review is beneficial to the sources credibility. From other studies was derived that the same goes

for purchase intention and product attitude (Kusumasondjaja et al., 2012; Pornpitakpan, 2004).

Results of this study show that the formed expectations are not completely met. More precisely, online reviews with the presence of personal information have a higher level of credibility compared to online reviews without personal information, but do not automatically have a more positive influence on purchase intention and product attitude. This illustrates that a credible online review does not naturally result in a higher purchase intention or a positive product attitude.

As mentioned before, consumers always look for ways to identify themselves with someone (Kusumasondjaja et al. 2012). This identification process was possibly sufficient enough for the credibility aspect, but does not influence purchase intention and product attitude. A certain behavioural intention like a purchase is often the consequence of a favourable product attitude. It is understandable that a negative product attitude negatively influences purchase intention.

The Self Categorization Theory or the Social Identity Theory (SIT) could possibly affect the negative outcomes regarding purchase intention and product attitude. According to the Self Categorization Theory, people categorize themselves to several social identities, they represent a particular social group (Turner et al. 1987). The Social Identity Theory claims that people categorize other people in one or more social groups (Hogg & Abrams, 1993). People compare themselves with other people in order to find out if they belong to the same social group. The SIT claims that people have multiple 'personal selves', therefore it is possible that people associate themselves with more than one social group. A group association is also called an in-group effect (Turner and Tajfel, 1986).

Personal information that is enclosed by an online review can be used in an identification process. According to this information, people can determine if they feel connected with the reviewer. So, a social connection between the reader of an online review and the reviewer self is considered as important (Verbrugge, 2012). It is likely that in this study the connection was insufficient for a higher purchase intention and a more favourable product attitude. The reviewer in this study was twenty-seven years old. Possibly there were participants who did not feel a connection with this age group. It is also possible

that participants did not feel connected with the reviewer since this person came from another region or had another gender.

5.1.3. Product types

Two product types were distinguished in this study, experience goods and search goods. Search goods are products with characteristics that are easy to evaluate and to compare with other products. Product characteristics of experience goods are difficult to observe prior the purchase. These product characteristics can be assessed after consumption (Nelson, 1970). According to the theory it was expected that eWOM messages of experience goods have more credibility compared to eWOM messages of search goods. Information of experience goods is often more scarce compared to information of search goods; therefore the value of product information about experience goods may increase and is considered as more credible (Park & Lee, 2009). These authors suggested also that users with a high level of expertise often write eWOM messages about experience goods. This leads possibly to a more credible online review.

Experience goods are often holistically and characterized with subjectivity, aesthetics and emotions (Frost et al, 2008). Subjectivity is related to someone's personal opinion about a product or a person. The experience good in this study, a perfume, is a product that ideally lends itself to subjectivity. This means that it is likely that consumers have a certain attitude towards the reviewed product prior reading the review. The level of credibility will decrease when review information is somewhat contradictory in relation to someone's attitude. This effect may have occurred in this research. Results indicate that an eWOM message of an experience good is not necessarily more credible.

In addition, reading the online review, which was presented in this study, was not a result of goal-oriented searching, which is usually the case. Therefore it is expected that consumers are less motivated to perceive the online review and the reviewer as credible, which applies also for the product types. The outcomes of the study also showed that participants had a more positive product attitude towards the experience good (perfume) than to the search good (antivirus program).

5.2 Moderating effects

5.2.1 Valence and personal information

In this research it was assumed that negative online reviews with the presence of personal information have a more positive effect on a) credibility, b) purchase intention and c) product attitude compared to negative online reviews without personal information while there is no difference in a) credibility, b) purchase intention and c) product attitude in case of positive online reviews with or without personal information. This hypothesis was derived from a study by Xu (2014). This author focused on online review valence and the availability of a profile picture alongside online reviews. According to Xu (2014), consumers believe that negative online reviews are non-normative, therefore, negative online reviews need a more careful analysis. Positive online reviews are seen as normative. The outcomes demonstrate that this hypothesis is partly supported. Both components of credibility, trustworthiness and expertise, were found non-significant. Thus negative online reviews with the presence of personal information are not necessarily perceived as more credible compared to negative online reviews without personal information. The same is true for product attitude and purchase intention. The hypothesis is partly supported since there was no difference in credibility, product attitude and purchase intention by positive online reviews either with or without personal information.

It is difficult to declare these results since other results were expected. A possible explanation is that participants did not believe that the reviews were written out of resentment. Expected is that reviews posted out of resentment are not completely trustworthy. These reviews are perhaps more non-normative than the review which was shown in this research. This could mean that it is possible that the shown negative review was not negative enough to be considered as non-normative.

5.2.2 Valence and product type

It was stated that when it is difficult to assess the quality of a product, value of available information would increase. A statement that is typically applicable for experience goods. It was also stated that consumers perceive negative information as more important compared to positive information, since it may help in avoiding losses. The following hypothesis was formulated, negative online reviews of experience goods have a more positive effect on a) credibility, b) purchase intention and c) product attitude compared to negative online reviews of search goods while positive online reviews of search goods have a more positive effect on a) credibility, b) purchase intention and c) product attitude than positive online

reviews of experience goods. This hypothesis is solely supported for the purchase intention variable, this hypothesis can not be applied for credibility and product attitude.

Subjectivity may have influenced the outcomes. The presented products should be familiar to the participants; people could use these products on a daily basis. Therefore participants also could have a biased opinion towards the presented products. Doh and Hwang (2009) confirmed this point of view. They mentioned that prior knowledge and product involvement have an impact on the credibility of an online review, for both positive and negative reviews.

Results do indicate that for both experience goods and search goods a positive online review results in a higher purchase intention. A negative online review leads to a lower purchase intention. However, search goods have a higher purchase intention compared to experience goods, when the review is positive. The opposite occurs when the review is negative. In this case the experience good has a higher purchase intention compared to a search good. As mentioned above, search goods are often characterized by objectivity. Hence, they are positive or negative. Experience goods often elicit a sensation and are characterized by subjectivity. Thus, especially for search goods an online review may figuratively make or break a product. A negative online review ensures a significant decrease in purchase intention. A positive online review ensures an increase in purchase intention. For an experience good is it more or less always necessary to experience the product, which means that online reviews for experience goods are less decisive.

5.2.3 Product type and personal information

From the theory was derived that online reviews with the presence of personal information have a more positive effect on a) credibility, b) purchase intention and c) product attitude for experience goods compared to a) credibility, b) purchase intention and c) product attitude for search goods while there is no difference in a) credibility, b) purchase intention and c) product attitude in case of no personal information for search goods and for experience goods. The results showed a marginally significant interaction effect for personal information and product type on both trustworthiness and expertise. Surprisingly, the results show exactly the contrary of what was stated. This means that participants perceived an eWOM message of a search good with the presence of a reviewer's personal information as more credible in comparison with an eWOM message of an experience good with the presence of personal information. The hypothesis is partly supported since there was no

difference in credibility, purchase intention and product attitude in case of no personal information for search goods and experience goods.

The search good in this study, an antivirus program, connects with a broader situation. The program will contribute to the safety of someone's computer or laptop. These electronic products normally are more expensive than the anti-virus program. It can be assumed that consumers use their personal computers for a lot of privacy related activities, online banking for instance. Protection of their data is therefore of great importance. This puts a different perspective on the used search good in this research. Since such a good may contribute to the protection of someone's online privacy. It is likely that consumer will seek for a credible online review regarding an anti-virus program. Since it was expected that personal information would contribute to a reviewer's credibility is it also likely that the search good with presence of personal information is deemed, in this regard, as more credible. Dommeyer and Gross (2003) confirmed that consumer are generally motivated to protect their online privacy, which may support this explanation.

5.3 Practical implications

The results of this study provide a few recommendations that can be used in practice, these recommendations are described in this paragraph. Prior literature indicated that online reviews become increasingly important in a consumer's purchase process. More specifically, a shift in consumers' trust has occurred in the last few years from product advertisements and expert opinions towards online reviews. It is essentially for e-commerce organisations to be aware of this. In addition, e-commerce organisations could anticipate to this shift. This research could provide a guidance for e-commerce organisations.

First of all, offering consumers the possibility to reveal personal information could positively affect the credibility of an online review. E-commerce organisations could offer consumers the possibility to upload their profile picture. But also the visibility of the age of the reviewer, place of residence and the number of written reviews contributes to a credible online review. E-commerce organisations like for instance Wehkamp.nl could make a change in the structure of their online reviews in order to increase the perceived credibility. The online reviews of this organisation look currently like this (figure 8). The author of this study expects that the modified online review, which is shown in figure 9, is perceived as more credible than the current online review.

Figure 8. Current online review structure (Wehkamp.nl)

Figure 9. Modified online review structure (Wehkamp.nl)

Secondly, it is interesting to know that positive online reviews result in a more favourable product attitude and a higher purchase intention. While on the other hand, negative online reviews result in a less favourable product attitude and a lower purchase intention. Therefore, it is recommended for e-commerce organisations to show the positive online reviews first, these reviews are beneficial for a consumer's purchase intention and finally also for a organisations turn-over.

Outcomes also demonstrated that different product types, experience goods and search goods, have a moderating effect. More specifically, valence and the type of product have an influence on a consumer's purchase intention, something that is also interesting to know for e-commerce companies. Positive online reviews of search goods result in a higher purchase intention compared to positive online reviews of experience goods. On the other hand, a negative online review of an experience good result in a higher purchase intention compared to a negative online review of a search good.

5.4 Theoretical contribution

The theoretical contribution is described in this section. Aim of this study was to give more insights to existing literature regarding online reviews, valence, availability of personal

information and the moderating role of product type. There are numerous studies that focus on online reviews and valence. However, there are not that many studies that focus on the availability of personal information part. This research can be used as a basis, especially for this part.

This study also demonstrates that product type is an interesting moderator, something that was claimed by several researchers (Park & Lee, 2009; Hao et al, 2010; Cheng & Zou, 2010). In addition, this research shows that it is not always a well-established fact that a credible online review leads to a more favourable product attitude and a more positive purchase intention.

5.5 Limitations and future research directions

The last paragraph explained how outcomes of this study contribute to existing literature. However, there are some limitations that have to be taken into account for future research. First of all, a manipulation check on valence was not performed. It is not statistically proven that participants perceived the positive online review as positive and the negative one as negative. The manipulation check was deemed superfluous, according to the author it is perfectly clear that the positive eWOM message contains solely positive statements and the negative eWOM message solely negative statements. Anyway, it needs to be considered as a weakness of this research.

A within-subjects design was chosen for this research, which means that each participant was confronted with two conditions. It may be the case that the first condition had an influence on the answers of the second condition. It is hard to say if this is also directly a weakness of this study, nonetheless, it needs to be taken into account for future research.

Two different product types are recognized in this study; experience goods and search goods, more specific a perfume and an antivirus program. Therefore it is hard to generalize the findings, since every product has its own unique features. Using other product types may reveal other results. Result may also differ when using products or services or possibly credence goods. For future research it is advised to use other product types and to find out if generalizability is possible. Useful experience products according to the pre-test of this study are for instance, sunglasses, shoes or a mattress. Useful search products are for instance, a coffee machine, a refrigerator or a computer game.

The personal information part of the online reviews contained only a male picture or just an avatar. For future research it will be interesting to look at gender effects by using a female picture. This is also advised by Xu (2014) for future research. In addition, participants encountered only positive eWOM messages or only negative eWOM messages. It could be interesting to use instead of a certain message direction (valence), eWOM messages with for instance pros and cons about a certain product. To conclude, several variables are disregarded in this research, however they could influence the outcomes. To be more specific, consumer characteristics like involvement and commitment could play a role too. Park and Lee (2009) suggested also taking these variables into consideration for future research.

References

Almana, A.M., and Mirza, A.A. (2013). The impact of electronic word of mouth on consumers' purchasing decisions. *International Journal of Computer applications*, 82, 9, 23-31.

Ba, S., and Pavlou, P.A. (2002). Evidence of the effect of trust in electronic markets: price premiums and buyer behavior, *Management Information System*, 26 (3), 243–267.

Bae, S., & Lee, T. (2011). Product Type and Consumers' Perception of online consumer reviews. *Electronic Markets*, 21 (4), 255-266.

Baker, M.J., and Churchill, G.A. (1977). The impact of physically attractive models on advertising evaluations. *Journal of Marketing Research*, 14, 538- 555.

Benedicktus, R.L., and Andrews, M.L. (2006). Building trust with consensus information: The effects of valence and sequence direction. *Journal of Interactive Advertising*, 6 (2), 15-25.

Berkowitz, E.N., Kerin, R.A., and Rudelius, W. (1990) Marketing (2nd ed.). Homewood, Illinois, Irwin.

Bone, P.F. (1995). Word-of-mouth effects on short-term and long-term product judgments. *Journal of Bussiness Research*, 32 (3), 213–23.

Chatterjee, P. (2011). Drivers of new product recommending and referral behaviour on social network sites. *International Journal of Advertising,* 30(1), 77–101.

Cheng, X., and Zhou, M. (2010). Study on effect of ewom: A literature review and suggestions for future research, in Proceedings of the 4th International Conference on Management and Service Science. 1–4.

Cheung, C.M.K., and Thadani, D.R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems*, 54, 461-470.

Dichter, E. (1966). How word-of-mouth advertising works. *Harvard Business Review,* 16, 147–166.

Doh, S.J., and Hwang, J.S. (2009). Rapid communication: How consumers evaluate eWOM (electronic word-of-mouth) messages. *Journal of Cyberpsychology and Behavior*, 12(2), 193-197.

Dommeyer, C.J., and Gross, B.L. (2003). What consumers know and what they do: An investigation of consumer knowledge, awareness, and use of privacy protection strategies. *Journal of Interactive Marketing*, 17(2), 34-51.

East, R., Hammond, K., and Lomax, W. (2008). Measuring the impact of positive and negative word of mouth on brand purchase probability. *Journal of Research in Marketing*, 215-224.

Fan, Y.W., and Miao, Y.F. (2012). Effects of electronic word-of-mouth on consumer purchase intention: The perspective of gender differences. *International Journal of Electronic Business Management*, 10 (3), 175-181.

Fan, Y.W., Miao, Y.H., and Lin, R.Y. (2013). Establishing the adaption of electronic word-of-mouth through consumers' perceived credibility. *International Business Research*, 6(3), 58-65.

Filieri, R., and McLeay, F. (2013). E-WOM and accommodation: An analysis of the factors that influence travelers' adaption of information from online reviews. *Journal of Travel Research*, 53 (44), 44-57.

Fiske, S.T. (1980). Attention and weight in person perception: The impact of negative and extreme behavior. *Journal of Personality and Social Psychology*, 38 (6), 889–906.

Fogg, B.J. (2002). Prominence-Interpretation theory: Explaining how people assess credibility online. Retrieved on 12-12-2014, via Stanford Persuasive Technology Lab, Stanford University, Website: http://credibility.stanford.edu/pit.html.

Folkes, V.S. (1988), Recent attribution research in consumer behavior: A review and new directions. *Journal of Consumer Research*, 14 (4), 548-565.

Forman, C., Ghose, A., and Wiesenfeld, B. (2008). Examining the relationship between reviews and sales: The role of reviewer identity disclosure in electronic markets. *Information Systems Research*, 19 (3), 291–313.

Frost, J.H., Chance, Z., Norton, M.I., and Ariely. D. (2008). People are experience goods: Improving online dating with virtual dates. *Journal of Interactive Marketing*, 22 (1), 51-61.

Goldberg, M.E., and Hartwick, J. (1990). The effects of advertiser reputation and extremity of advertising claim on advertising effectiveness. *Journal of Consumer Research,* 17, 172–179.

Guadagno, R.E., Okdie, B.M, and Eno, C.A. (2008). Who blogs? Personality predictors of blogging. *Computers in Human Behavior*, 24, 1993-2004.

Hao, Y.Y., Ye, Q., Li, Y.J. and Cheng, Z. (2010). How does the valence of online consumer reviews matter in consumer decision making? Differences between search Goods and experience Goods. Proceedings of the 43rd Hawaii International Conference on System Sciences, 1-10, Honolulu, HI.

Hartman, K.B., Hunt, J.B., and Childers, C.Y. (2013). Effects of eWOM valence: Examining consumer choice using evaluations of teaching. *Journal of Behavioral Studies in Business,* 6, 1-12.

Hennig-Thurau, T., Qwinner, K.P., Walsh, G., and Gremler, D.D. (2004), Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet? *Journal of Interactive Marketing,* 18(1), 38-52.

Highhouse, S. and Paese, P.W. (1996). Problem domain and prospect frame: Choice under opportunity versus threat. *Personality and Social Psychology Bulletin,*22, 2, 124-132.

Hogg, M.A., and Abrams, D. (1988). Social identifications: A social Psychology of Intergroup relations and group processes. London: Routledge.

Huang, P., Lurie, N.H., and Mitra, S. (2009). Searching for experience on the web: An empirical examination of consumer behavior for search and experience goods. *Journal of Marketing*, 73, 55-69.

Huefner, J.C., Parry, B.L., Payne, C.R., Otto, S.D., Huff, S.C., Swenson, M.J., and Hunt, H.K. (2002). Consumer retaliation: Confirmation and extension. *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, 15, 114-127.

Jianlin, W., Ning, Z.H.U., and Qi, D. (2010). Consumer ethnocentrism, product attitudes and purchase intentions of domestic products in China. *International Conference on Engineering and Business Management*.

Jones, E. E., & Davis, K. E. (1965). From acts to dispositions: The attribution process in person perception. In L. Berkowitz (Ed.), Advances in experimental social psychology (pp. 219–266). New York: Academic Press.

Kanouse, David E. and L. Reid Hanson (1972). Negativity in Evaluations, in Attribution: *Perceiving the Causes of Behavior*, Edward E. Jones, David C. Kanhouse, Harold H. Kelley, Richard A. Nesbitt, Stuart Valins, and Bernard Weiner, eds. Morristown, NJ: General Learning Press.

Kusumasondjaja, S., Shanka, T., and Marchegiani, C. (2012). Credibility of online reviews and initial trust: The roles of reviewer's identity and review valence. *Journal of Vacation Marketing*, 18 (3), 185-195.

Lackermair, G., Kailer, D., and Kanmaz, K. (2013). Importance of online product reviews from a consumer's perspective. *Advances in Economics and Business*, 1(1), 1-5.

Lee, K.T., and Koo, D.M. (2012) Effects of attribute and valence of e-WOM on message adoption: Moderating role of subjective knowledge and regulatory focus. *Computers in Human Behavior*, 28, 1974-1984.

Lee, M., Rodgers, S., and Kim, M. (2009). Effects of valence and extremity of eWOM on attitude toward the brand and website. *Journal of Current Issues and Research in Advertising*, 31 (2), 1-11.

Lee, E.J., and Shin, S.Y. (2014). When do consumers buy online product reviews? Effects of review quality, product type, and reviewer's photo. *Computer in Human Behavior,* 31, 356-366.

Lee, S.H. (2009). How do online reviews affect purchasing intention? *African Journal of Business Management,* 3 (10), 576-581.

Lee, J., Park D.H., and Han I. (2008). The effect of negative online consumer reviews on product attitude: An information processing view. *Electronic Commerce Research and Applications,* 7(3), 341–352.

Lee, M., Rodgers, S., and Kim, M.M. (2009) Effects of valence and extremity of eWOM on attitude toward the brand and website. *Journal of Current Issues & Research in Advertising*, 31 (2), 1-11.

McKnight, D. H., and Kacmar, C. (2006). Factors of information credibility for an internet advice site. Proceedings of the 39th Hawaii International Conference on System Science.

Matthes, J., Schemer, C., and Wirth, W. (2007). Investigating the hidden impact of brand placement in television magazines. *International Journal of Advertising*, 26 (4), 477-503.

Mizerski, R.W., Golden, L.L., and Kernan, J.B. (1979), The Attribution Process in Consumer Decision Making. *Journal of Consumer Research*, 6 (2), 123-140.

Moran, G., and Muzellec, L. (2014). eWOM credibility on social networking sites: A Framework. *Journal of Marketing Communications*, 1-13.

Mudambi, S.M. (2010). What makes a helpful online review? A study of customer reviews on Amazon.com. *Management Information Systems quarterly,* 34 (1), 185-200.

Nelson, P. (1970), Information and Consumer Behavior, *Journal of Political Economy*, 78, 311-29.

Nielsen, Reclame-uitgaven stegen in 2013. Retrieved on 1 May, 2015, from www.nielsen.com.

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19 (3), 39-52.

Pan, L.Y., and Chiou, J.S. (2011). How much can you trust online information? Cues for perceived trustworthiness of consumer-generated online information. *Journal of Interactive Marketing*, 25, 67-74.

Park, C. and Lee, T.M. (2009). Information direction, website reputation, and eWOM effect: A moderating role of product type. *Journal of Business Research*, 62, 61-67.

Pornpitakpan, C. (2004). The persuasiveness of source credibility: A critical review of five decades' evidence. *Journal of Applied Social Psychology*, 34 (2), 243-281.

Purwanto, E. (2014). The effect of consumer ethnocentrism on perceived domestic product quality and purchase intentions among young consumers in Jakarta, Indonesia. *International Journal of Asian Social Science*, 4 (9), 1003-1012.

Schiffman, Leon G. and Leslie Lazar Kanuk (1997), Consumer Behaviour, 6th ed. Upper Saddle River, NJ: Prentice Hall.

Skowronski, J.J. and Carlston, D.E. (1989), Negativity and extremity Biases in impression formation: A review of explanations, *Psychological Bulletin*, 105(1), 131–42.

Skowronski, J.J., and Carlston D.E. (1987). Social judgment and social memory: the role of cue diagnosticity in negativity, positivity, and extremity biases. *Journal of Personality and Social Psychology*, 52 (4), 689–99.

Sparks, B., and Browning, V. (2011). The impact of online reviews on hotel booking intentions and trust. *Tourism Management*, 32 (6), 1310-1323.

Staw, B.M. (1975). Knee-deep in the big muddy: A study of escalating commitment to a chosen course of action. *Organizational Behavior and Human Performance*, 16, 27-44.

Sundaram, D.S., and Webster, C. (1999). The role of brand familiarity on the impact of word-of-mouth communication on brand evaluations. *Advances in Consumer Research,* 26, 664–70.

Tajfel, H., and Turner, J.C. (1986). The social identity theory of inter-group behavior. In S. Worchel and L.W. Austin (eds.), *Psychology of Intergroup Relations*. Chigago: Nelson-Hall.

Turner, J.C., Hogg, M.A., Oakes, O.J., Reicher, S.D., and Wetherell, M.S. (1987). Rediscovering the social group: A self-categorization theory. Oxford, UK: Blackwell.

Verbrugge, T. (2012). Online reviews en sociale connecties: De invloed van sociale connecties en inhoud van online reviews op de attitudes van de consument. *Master Thesis, University of Tilburg, Netherlands.*

Wang, C.C., and Chien, H.Y. (2012). Believe or scepticism? An empirical study on individuals' attitude to blog product review. *International Journal of Innovation, Management and Technology*, 3 (4), 343-348.

Weathers, D., Subhash, S., and Wood, S.L. (2007). Effects of online communication practices on consumer perceptions of performance uncertainty for search and experience goods. *Journal of Retailing*, 83 (4), 393–401.

Weinberger, M.G. & Dillon, W.R. (1980). The effect of unfavorable product rating information. *Advances in Consumer Research*, 7, 528-532.

Whitlar, D.B., Geurts, M.D., and Swenson, M.J., (1993). New product forecasting with a purchase intention survey. *The Journal of Business Forecasting Methods Systems and Systems*, 12(3), 1-18.

Wojnicki, A. (2006). Word-of-mouth and word-of-web: Talking about products, talking about me. *Advances in Consumer Research*, 33(1), 573-575.

Wu, L.L., and Su, S.Y. (2002). Customers' acceptance of a website for product information search. *The second international conference on electronic business*, Taipei, Taiwan, 1-7.

Xia, L., and Bechwati, N.N. (2008). Word of mouse: The role of cognitive personalization in online consumer reviews. *Journal of Advertising*, 9 (1), 3-13.

Xie, H.J., Miao, L., Kuo, P.J. and 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, 178-183.

Xu, Q. (2014). Should I trust him? The effects of reviewer profile characteristics on eWOM credibility. *Computer in Human Behavior*, 33, 136-144.

Yen, C.L., and Tang, C.H. (2015). Hotel attribute performance, eWOM motivations, and media choice. *International Journal of Hospitality Management*, 46, 79-88.

Appendix A. Online Reviews

wehkamp.nl

Daan Bosch
27 jaar
Amsterdam
Aantal reviews: 17

Een geur op basis van appel, Bergamot en een vleugje kaneel, een echte aanrader! Heb dit product sinds kort in mijn bezit en ben er louter enthousiast over! De geur is erg fris en blijft lang hangen. Een geur die absoluut niet gaat vervelen. Het product heeft een mooie verpakking en ziet er luxe uit. Kortom een absolute topper!

wehkamp.nl

Daan Bosch
27 jaar
Amsterdam
Aantal reviews: 17

Ben sinds kort in het bezit van dit product en ben blij dat ik maar 30ml heb gekocht. De geur is naar mijn mening te sterk. Het flesje is erg onhandig en de drukknop hapert met enige regelmaat. Daarnaast loopt voor m'n gevoel half Nederland rond met dit luchtje, ook daarom zou ik het product zeker niet willen aanraden. Een zwaar overschat product en ver beneden mijn verwachting.
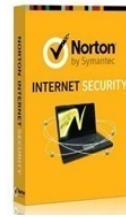
wehkamp.nl

Maestro17

Een geur op basis van appel, Bergamot en een vleugje kaneel, een echte aanrader! Heb dit product sinds kort in mijn bezit en ben er louter enthousiast over! De geur is erg fris en blijft lang hangen. Een geur die absoluut niet gaat vervelen. Het product heeft een mooie verpakking en ziet er luxe uit. Kortom een absolute topper!

wehkamp.nl

Maestro17

Ben sinds kort in het bezit van dit product en ben blij dat ik maar 30ml heb gekocht. De geur is naar mijn mening te sterk. Het flesje is erg onhandig en de drukknop hapert met enige regelmaat. Daarnaast loopt voor m'n gevoel half Nederland rond met dit luchtje, ook daarom zou ik het product zeker niet willen aanraden. Een zwaar overschat product en ver beneden mijn verwachting.
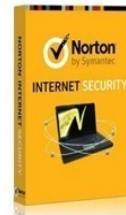
wehkamp.nl

Het beste beveiligingsprogramma wat ik in jaren ben
tegengekomen! Installatie ging perfect en het programma is zeer
gebruiksvriendelijk. Ik merk nauwelijks dat mijn computer
vertraagd terwijl het programma toch gewoon op de achtergrond
draait. Ik vertrouw blind op dit anti virus programma. Ik kan deze
antivirusscanner dan ook absoluut aanbevelen!

Daan Bosch
27 jaar
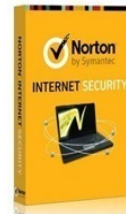Amsterdam
Aantal reviews: 17

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wehkamp.nl

Heb dit product sinds kort in mijn bezit en ben er absoluut niet
tevreden over. De handleiding is zeer beperkt en het scannen op
virussen duurt een eeuwigheid. Sinds ik gebruik maak van dit
product is mijn computer ook flink trager geworden. Het opstarten
van mijn computer mag gerust een ramp genoemd worden. Ik zal
je vooral willen aanraden dit product niet aan te schaffen.

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Maestro17
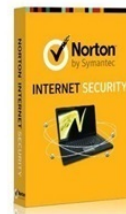
Appendix B. Questionnaire

Welkom,

Alvast bedankt dat u even de tijd wil nemen om deze vragenlijst in te vullen. Deze vragenlijst is onderdeel van mijn afstudeeronderzoek van de opleiding Communicatie Wetenschappen aan de Universiteit Twente. Het invullen van deze vragenlijst zal ongeveer 5 minuten in beslag nemen. De vragen hebben betrekking op (bestaande) online reviews en de betrouwbaarheid van deze berichten.

Met vriendelijke groet,

Maarten Koenders

Q1. Wat is uw geslacht?
- ○ Man
- ○ Vrouw

Q2. Wat is uw leeftijd?

Q3. Welke opleiding volgt u momenteel of heeft u afgerond?
- ○ Geen opleiding
- ○ Lagere school / basisonderwijs
- ○ LBO, VBO, LTS, LHNO, VMBO
- ○ MAVO, VMBO-t, MBO-kort
- ○ MBO, MTS, MEAO
- ○ HAVO, VWO, Gymnasium
- ○ HBO, HEAO, PABO, HTS
- ○ Universiteit
- ○ Anders, namelijk .... _____

Q4. Vond u deze online review:

	1	2	3	4	5
Betrouwbaar:Onbetrouwbaar	○	○	○	○	○
Eerlijk:Oneerlijk	○	○	○	○	○
Te vertrouwen:Niet te vertrouwen	○	○	○	○	○
Oprecht:Onoprecht	○	○	○	○	○
Integer:Niet integer	○	○	○	○	○

Q5. In hoeverre vond u de reviewer.

	1	2	3	4	5
Expert:Geen expert	❍	❍	❍	❍	❍
Deskundig:Ondeskundig	❍	❍	❍	❍	❍
Goed geïnformeerd:Niet goed geïnformeerd	❍	❍	❍	❍	❍
Gekwalificeerd:Ongekwalificeerd	❍	❍	❍	❍	❍
Geschoold:Ongeschoold	❍	❍	❍	❍	❍

Q6. Bepaal uw houding t.o.v. het product dat te zien is in de online review.

	1	2	3	4	5
Vriendelijk:Onvriendelijk	❍	❍	❍	❍	❍
Positief:Negatief	❍	❍	❍	❍	❍
Aanlokkelijk:Niet aanlokkelijk	❍	❍	❍	❍	❍
Interessant:Niet interessant	❍	❍	❍	❍	❍
Aantrekkelijk:Niet aantrekkelijk	❍	❍	❍	❍	❍

Q7. Omschrijf in hoeverre u het eens bent met de volgende stellingen, van helemaal mee oneens tot helemaal mee eens.

	Helemaal mee oneens	Mee oneens	Een beetje mee oneens	Niet mee oneens / Niet mee eens	Een beetje mee eens	Mee eens	Helemaal mee eens
Na het lezen van de online review wens ik dit product te kopen	○	○	○	○	○	○	○
Ik overweeg dit product te kopen na het lezen van de online review.	○	○	○	○	○	○	○
Ik heb de intentie het product uit de online review te proberen.	○	○	○	○	○	○	○
Ik ben van plan om in de toekomst op zoek te gaan naar het in de online review benoemde product.	○	○	○	○	○	○	○
Ik ben van plan om in de toekomst het benoemde	○	○	○	○	○	○	○

product te kopen.							