Thesis Marketing

ERASMUS SCHOOL OF ECONOMICS

MSc. Economics & Business (Marketing)

Name student: Robin den Haan

Student ID number: 544903

Supervisor: V. Landsman-Schwartz
Second assessor: V. Avagyan

An automotive study on the effect of eWOM on decision making with emphasis on the role of product or service choices

Date final version: August 17, 2020

Preface

The main reason why I chose for this topic is due the growing importance of electronic word of mouth alongside user-generated content. To be more specific, I work as a car salesman at a regional dealership and during this work I have experienced how different kind of reviews can influence a company positively or even negatively. Especially local dealerships could benefit from reviews (more on- and offline traffic, more sales, greater relationship, create trust and become more reliable) or just experience nuisance (mostly the opposite effects). Moreover, I see the changing behavior of consumers who are doubting about a car purchase or even want to use a 'shared' car because several (dis)advantages of both. From this I decided to investigate what the influence of eWOM is on decision making in this automotive empirical context.

I declare that the text and work presented in this Master thesis is original and that no sources other than those mentioned in the text and its references have been used in creating the Master thesis.

Last but not least, I want to thank everyone involved with the work of this thesis whereby many pain points also emerged. Moreover, even with a lot struggles, I am glad that I was able to complete this research.

Author: Robin den Haan

Executive Summary

The purchasing behavior of consumers has been greatly influenced in recent years by the availability of digital information sources. Back in the days, the information available to consumers was fairly limited regarding car purchase behavior (e.g. offline data, psychical showroom visits, brochures and personnel). In the early 2000's the information sources for consumers came in abundance due the introduction of web 2.0 (i.e. reviews, blogs and video's). User-generated content became one of the most influential sources of information regarding purchase decision behavior. The importance of user-generated content also applies for the automotive/transportation field. In addition, consumers nowadays have more choices regarding car (purchase) decisions. Today consumers have plenty of options and for example are able to buy, rent or share a car and thus are more critical because of the access towards plenty of information sources.

This study aimed to investigate the effect of reviews on car decision making. A (conceptual) model has been developed to investigate the effects of review volume and review valence on decision making in the automotive/transportation field. However, this study represents the attitude of consumers to review volume and valence in a general sense instead actual volume and valence of reviews used in decision making. To make the research distinctive for this empirical context, the importance and impact of review volume and valence was combined with making a choice for a product (car purchase) or service (use a 'shared' car) and thus as a moderating variable. Furthermore, this study investigated whether attitude towards eWOM played a mediating role between review volume and valence and car (purchase) decision making.

To be able to test all set up hypotheses, a self-administered survey was created and held under the right population (consumers which purchased a car and/or used a 'shared' car in the past three years). In addition, a total of 177 valid responses were achieved. The survey contained questions for each of the items in the conceptual model and provided access to perform several regression analysis. In line with earlier findings in the field of electronic word of mouth (reviews), this study identified that review valence (quality of reviews) significantly is affecting consumers' purchase decisions in a positive sense. In addition and not in line with earlier findings, the positive effect for review volume (quantity of reviews) could not be found. Regarding the interaction effects it is clear that consumers who purchase a car differ from consumers who use a 'shared' car when it has to do with the quality of reviews. In addition, the relation between review valence and decision making is less strong for sharers than buyers. Finally, there was no mediating effect for attitude towards eWOM, which could explain the relationship between review volume and review valence on decision making.

This study contributes to the academic field of electronic word of mouth alongside user-generated content. Moreover, this study sets managerial implications for marketing managers of all kind of car dealerships and car sharing companies when it comes to (online) reviews.

Table of Content

1. Introduction

1.1 Background

Before the introduction of web 2.0 in 2004 (George & Scerri, 2016, p. 2), information asymmetry played an important role regarding decision making. Buyers had a limited number of sources to retrieve purchasing information (e.g. offline data, psychical places, brochures and personnel), which created a breach in trust between buyer and seller. Because of this buyers felt disadvantaged regarding the decision making of a product or service, which is also known as caveat emptor (Pink, 2013). Since the past decades this information asymmetry changed towards information symmetry, where consumers are able to collect required information on their own. The introduction of web 2.0 and internet created the possibility to evaluate and compare different products and services through different off- and online channels. A passive attitude of the consumer changed towards an active attitude, where consumers are sharing experiences with each other.

In line with this, the purchase behavior of consumers is influenced by word of mouth (WOM). For example, Ahmad Zamil (2011) found that negative WOM had (more) impact on purchase behavior. In addition, the source of WOM had influence, meaning that family, friends, peers and relatives had a greater impact than companies staff and salesmen (Ahmad Zamil, 2011). Word of mouth has been recognized as one of the most influential resources of information transmission (Reza & Samiei, 2012). Due the introduction of web 2.0 the domain of word of mouth has been shifted towards electronic word of mouth (eWOM). The internet has become an important, powerful and primary source of gathering information about the most various products, services and/or other (general) characteristics. eWOM alongside user-generated content (UGC)[1] has an increasing impact on the purchase behavior of consumers (Torlak, Özkara, Tiltay, Cengiz & Dülger, 2014).

Consumers now have the possibility to share their own experiences with others who are known or even not known. Users of different products and services are now able to upload online content through (reviews, blogs, videogames, forums, video's or wiki's) that can be accessed, viewed and downloaded by other people around the world (George & Scerri, 2016; Kloet, 2016; O'Reilly, 2005). Furthermore, online reviews are the most common and popular type of eWOM, negative or positive consumption-related experiences and recommendations can be shared with others (Constantinides & Holleschovsky, 2016; Yaylc & Bayram, 2012).

[1] User-generated content (UGC) can be created about a variety of experiences, places and topics (including abstract and concrete concepts). eWOM is in a more limited scope and is mainly written content about certain experiences or transactions (Ramirez, 2020)

eWOM alongside UGC can be important for products as well as services. Services are mostly interactive, intangible, personal, heterogenous, perishable and simultaneity (Infosurv Research, 2016). For products, the opposite usually applies. Product-based selling relies more on specific features of the product while service-based selling is more in line with personal requirements and needs of consumers (Peek, 2019). Probably, the effect and contribution of UGC and especially consumer-generated reviews (CGR) could differ between products and services. Depending on several factors such as the market, price, expected quality and expected risks it could be that consumers react differently to UGC and CGR. For example: if a consumer considers to do a purchase of $10.000 once and own the product the economic risk is higher than if a consumer pay $300 monthly and can stop a subscription after 12 months.

The automotive industry is large, consumers have a lot of choices. For example: they can choose to buy a car or to use a shared car. Purchasing a car can be classified as a product, renting a car can be classified as a service. Consumer-generated content (CGC) is seen as one of the most important information sources during the evaluation stage of the customer journey of a (potential) car buyer (Vellios, 2018; Weve Automotive, 2017). Furthermore, the fast evolution of the way consumers search and shop (offline towards online) for cars has caused a difference in each consumers' experience through the journey. The customer journey of car shoppers has become more complex than ever, in average 24 touch-points are within the customer journey of car shoppers. 19 of those touch-points are online touch-points, which includes dealership websites, consumer reviews sites, video sites and social media (Millward Brown, 2013). And today, they could even choose to use a shared car for several reasons (e.g. price, risk and convenience).

It is clear that the automotive purchase behavior has been changed due the introduction of internet. Customer journeys have become more complex and consumers rely more on UGC and eWOM in their decision making process. A better understanding in CGR behavior in the decision making phase of the consumer decision journey in the automotive industry (car buyers and car sharers) will help automotive companies (e.g. dealerships and sharing companies) to understand the effects. Strategies could be formulated on the findings. Other companies could benefit from the insights as well, the difference in the findings could be generalized to a service versus product circumstance.

1.2 Research objective

A lot of research in the field of UGC has been preceded. Within the field of UGC, a lot of research has been done into the customer journeys, touch-points, decision processes, purchase intentions and sales. Earlier studies focussed mainly on the effects of UGC through all the customer journey stages. However, no empirical research has been done before, which focussed on the effects of eWOM on (purchase) decisions with emphasis on the role of product or service choices within this (potential) effect. On a more specific level (empirical context), I would like to investigate the effects of CGR in automotive industry (purchase) decisions. In order to contribute in the existing field, which focussed on the effects of eWOM on purchase intentions/decisions, it is important to understand the role of product (car buying) or services (car sharing) choices within this effect. Earlier studies in the automotive landscape focussed on the effects of UGC in various stages of the customer journey, but in a context where consumers were car buyers only.

The results and conclusions of this research could be used in a broader aspect where stakeholders try to understand the effectiveness of CGR in a service as well as a product setting. This study on the effect of CGR will contribute to the existing literature and will help car sharing companies[2] as well as other car stakeholders (e.g. car dealerships and managers etc.) to improve their marketing strategies and further activities.

Furthermore, in order to contribute and to make this research even more interesting, this study aims to investigate the mediating role of attitude towards eWOM in relationship with eWOM and automotive/transportation (purchase) decisions. Also in this case, no empirical research has been done before, which focussed on the impact of eWOM on (purchase) decisions and the mediating (explanation) role of attitude towards eWOM within this concept. One extra measurement set could explain a lot within the psychological marketing field.

Especially, secondary data will be gathered through a survey on Dutch car sharing consumers and Dutch car buyers. Furthermore, other necessary sources as Google Trends, Euromonitor, Orbis and others will be used when applicable. The data collection time is between 1 and 3 months, a short period for data collection but hopefully it could contribute to the existing literature, which has been done on the field of UGC.

[2] Carsharing companies participate in a model where consumers can rent a car for short periods (e.g. hours and/or weeks) and whereby owners of the cars are mostly private individuals themselves who want to share their car(s). The car sharing companies bring the demand and supply together and earn a commission. For example: Snappcar, Greenwheels etc.

In line with all earlier mentioned information, the following main research question will be examined:

‘’What is the effect of CGR on the purchase decisions and what is the role of product or service choices within this effect?’’ and in empirical context: ‘’What is the effect of CGR on automotive/transportation (purchase) decisions and what is the role of car sharing or car purchasing choices within this effect?’’.

To answer the above research question the following sub-research questions were formulated:

- What are the effects of online reviews (CGR) on automotive/transportation (purchase) decisions?
- How does CGR affects’ consumers automotive/transportation (purchase) decisions?
- What is the moderating role of choice type (product: car buyer and service: car sharer) within the effect of CGR on automotive/transportation (purchase) decisions?
- What is the role of attitude in the relationship between eWOM and (purchase) decision?

1.3 Managerial relevance

The relevance of investigating the effect of UGC on purchase decisions in the automotive/transportation area is illustrated by the fact that automotive/transportation industry still faces a lot of changes in the marketing landscape. The emergence of web 2.0 and especially internet, made it possible for consumers to create UGC. Consumers are more relying on UGC, since it is a trustworthiness and mostly unbiased form of information.

For plenty of years, managers focused on the traditional marketing funnel. However, the emergence of internet ensured that the traditional funnel skips a lot of influential touch-points. Because of this, the consumer decision journey (CDJ) created by Court, Elzinga, Mulder and Vetvik (2009) is more consistent and applicable. According to the study of Court et al. (2009) continuing the use of the traditional funnel approach has two major consequences. Firstly, marketing managers miss important aspects, for instance, managers often push products and services while consumers prefer to make the decisions on their own with the correct necessary information. Secondly, managers lose a lot of unnecessary marketing spending. One even more important factor is that this study figured out that managers mostly focus on ‘’consider’’ and ‘’buy’’ stages while the ‘’evaluation’’ and after-purchase stages are even just as important on influencing consumers decisions (Edelman, 2010). In addition, several studies have proven that UGC has a lot of impact on the consumers’ decision process and whether the consumers decide to purchase or not.

Furthermore, as most hotels (services) are review driven, car sharing companies could be (and assumed) review driven as well (Chan, Lam, Chow, Fong, & Law, 2017). For this reason, I see the need to understand the effect of UGC and mainly CGR on (purchase) decisions in the automotive/transportation industry. To contribute to this field, the role of products or services choices is within this effect should be investigated.

Overall, managers of sharing companies such as SnappCar and managers of dealerships could benefit from understanding the effects of UGC. Managers from both (products and services) could benefit from more knowledge about the importance of reviews regarding to decision making for services or products. Furthermore, managers could benefit from the understanding of which elements (volume, valence, attitude) of eWOM could have more effect on decision making and thus which must be handled with care or should be anticipated on.

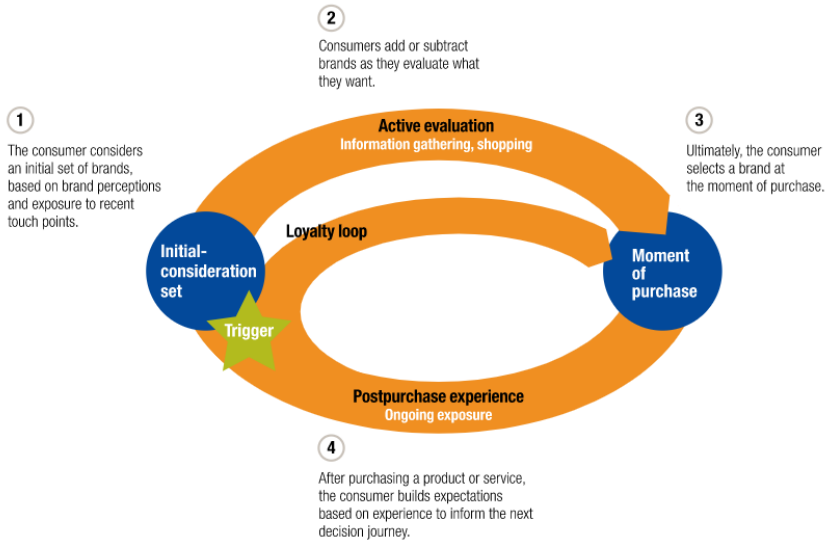


Figure 1: Consumer Decision Journey (Court et al., 2009; McKinsey, 2009)

In case of this paper, investigating the effect of CGR in the decision making stage of the CDJ model of Court et al. (2009) for car sharers and as well as car buyers could help managers of companies. Managers should understand the effect and importance of CGR in a broad perspective. Furthermore, managers could use the findings to improve activities related towards eWOM (active collecting reviews, react on positive as well negative reviews etc. and/or just benefit in another way from it). Companies could take advantage of reviews by creating trust, transparency and sympathy, which in turn can ensure larger customer flow and thus profits.

Referring to attitude towards eWOM, understanding how this factor explain the relationship between reviews and decision making, will help managers to understand how the psychological entry point of consumers towards eWOM and how they possible could influence this psychological aspect.

1.4 Academic relevance

First of all, a lot of research has been conducted in the field of UGC. For example, Chevalier and Mayzlin (2006), Duan, Gu and Whinston (2008) and Liu (2006) all focussed on the impact of UGC on sales. In those studies the effects of review volume (quantity) as well as the review valence (quality) were investigated. Furthermore, van Gils (2018) and Yang, Saratly and Walsh (2016) were more in line with investigating the effect of review volume on purchase intentions. Ballantine and Au Yeung (2015) and Vermeulen and Seegers (2009) both focussed on the effect of review valence on various stages as well as purchase

intentions. In addition, Bahtar and Muda (2016) and Panne (2017) focussed on the effects of on- and online marketing on purchase intentions and/or actions during various stages. Constantinides and Holleschovsky (2016) focussed on the effects of online product reviews on purchase decisions. So, a lot of findings were generated in the UGC field and related to this study.

However, there is almost no academic research, which has been done on the effect of UGC in line with the CDJ model of (Court et al., 2009). In addition, Panne (2017) and RouĊkova (2015) used the CDJ, but focussed on all particular stages within the model. Focussing on all phases often results in general recommendations. As earlier mentioned, Edelman (2010) figured out that the consideration and after-purchase phases are the most influential in consumers' (purchase) decisions. Because of this, Vellios (2018) aimed to investigate the effect of UGC in the evaluation phase of the CDJ.

Moreover, no study has focussed on the effect of CGR in the decision making stage of the CDJ of Court et al. (2009) in cooperation with the role of product or services choices. This research aims to contribute to the existing literature on the field of UGC by investigating the effect of CGR on purchase decisions within the automotive/transportation area. In addition, contributing within this field is necessary, so the role of automotive/transportation products or service choices is being considered. There is a distinguish in products (car buying) and services (car sharing) and results and findings within this study could be generalized to other circumstances as well.

Referring to attitude towards eWOM, a lot of research has been done that used attitude in any way or in any context. However, no research has been done before, which focussed on attitude towards eWOM in combination with the impact of reviews on decision making. For example, Bahtar and Muda (2016) and Zainal, Harun and Lily (2017) used attitude in an eWOM marketing context, but did not investigated attitude towards eWOM in a mediating role when it has to do with the relationship between reviews and decision making. This research contributes in terms of understanding attitude in field of eWOM related decision-making marketing.

2. Theoretical Framework

2.1 Theoretical background

2.2.1 User generated content and electronic word of mouth

Since the introduction of web 2.0 in 1999 and especially 2004 (it became popular) a digital evolution has begun. The purpose of web 2.0 was to connect people. Furthermore, the purpose was to make technology efficient for the society by letting people interact and collaborate with each other through social media dialogue as creators of UGC in a virtual community (O'Reilly, 2005). Social media developed fast, resulting in new platforms (e.g. weblogs, forums, wiki's and video's) where consumers were able to interact with other people and share their opinions with them about the most various products and services. UGC also known as eWOM refers to any content (audio, video, text and images) or a combination of those that can be shared through the internet (Khan, Hussin & Abdul, 2018). Furthermore, Hennig-Thurau, Gwinner, Walsh and Gremler (2004, p.39) define eWOM 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''*. Nowadays, consumers always rely on UGC to create a purchase decision (Bae & Lee, 2011). Furthermore, online reviews making it easier for consumers to make final purchase decisions, which have an effect on the product or brand's reputation and sales (Kudeshia & Kumar, 2017). See the figure (Figure 2) below for an overview of the types of UGC.

Types of User-generated Content	Prominent Platforms
Pictures	Instagram, Pinterest, Snapchat, Flickr
Personal Updates and Networking	Twitter, FourSquare, Facebook, LinkedIn
Reviews for Products and Services	Yelp, Rotten Tomatoes, ZocDoc, Amazon
Encyclopedia and Reference Sites	Wikipedia, Wikia
Videos	YouTube, Vine
Comments on News Articles	NY Times Online, WSJ Online
Crowdfunding	Crowdrise, Kickstarter, IndieGoGo
Sharing Platforms	Uber, Airbnb, Couchsurfing
Social Payments	Venmo, Square
Discussion / Question and Answer	Reddit, Quora, StackOverflow
Blogs	Tumblr, WordPress

Figure 2: Types of UGC and platforms - source: handbook Luca (2016) -

According to a comprehensive study of Nielsen (2015), recommendations of friends or 'known' people remain the most credible form of advertising among consumers. According to this study, 83% of the respondents said that they trust UGC (earned media) and recommendations of friends and/or family. Besides that, more than two third (2/3) of the consumers trust UGR and take those reviews into account when making an actual purchase intention. This study also shows that there's a difference in generations: millennials (21-34) consume media differently in comparison with older people (for instance: generation X). Generation X prefers to read or listen content, which give them control and better information processing through the customer decision journey. As mentioned earlier, 80% of car buyers gather information and advice from social networks rather than a salesperson. Also, 92% of the consumers prefer and trust earned media more than any type of advertising (Stackla, 2018; Weve Automotive, 2017).

With the previous data insights we can conclude that UGC and especially reviews have a great contribution towards purchase intentions of consumers. According to several other great studies, the main reason people prefer UGC instead of producer-generated content (PGC) is due the fact that UGC is considered more trustworthy, useful and unbiased because it is based on consumers' own experience (Bahtar & Muda, 2016; Buttle, 1998; Mir & Rehman, 2013; Verhellen, Dens & De Pelsmacker, 2013).

2.2.2 Decision making process and customer journey

The decision-making process has a close overlap with so known customer (decision) journey that has been explained earlier in this paper. While the traditional customer journey uses 5 stages in logical order in which a customer is going through (awareness, consideration, purchase, retention and loyalty), the CDJ of McKinsey focusses on just 4 stages (initial consideration, active evaluation, purchase and post purchase (experience). In 1898, the first signs of research regarding to the decision-making process came up when C.S. Lewis came up with the following slogan: ''Attract attention, maintain interest, create desire'' (Dragon360, 2011). Even later, in 1925 the fourth term 'get action' was added by E.K. Strong.

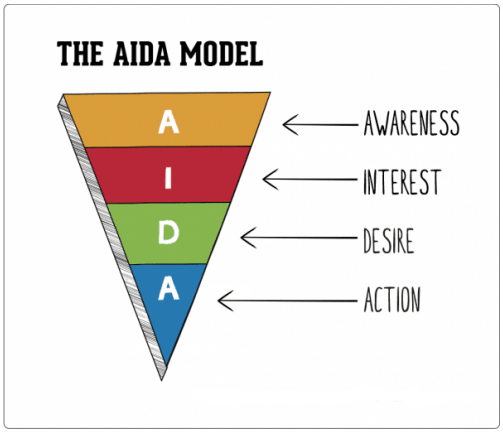


Figure 3: AIDA Model - source: C.S. Lewis and E.K. Strong (1925) -

Furthermore, the first stage ‘attention or awareness’ focusses on influencing the cognitive (knowledge) aspect of a consumers (i.e. awareness about the company or the product). The second ‘interest’ and third ‘desire’ stages focusses on the affective (feeling) aspect (i.e. interest and desire for offering) and the last stage ‘action’ focusses on the conative (actual behavior) aspect (i.e. where purchase takes place) (Michaelson & Stacks, 2011). In later studies, the steps of this AIDA model are mainly used as reference or starting points (Barry & Howard, 1990; Wijaya, 2012). Key developments of the AIDA model can be seen in chronological order (Wijaya, 2012). Later Lavidge and Steiner (1961) came up with the ‘Hierarchy of Effects’ model, which is an addition on the earlier AIDA models and takes 6-steps. Firstly, they focus on awareness and knowledge (cognitive). Secondly, liking and preference (affective) came and last but not least conviction and purchase (conative) made the model below complete.

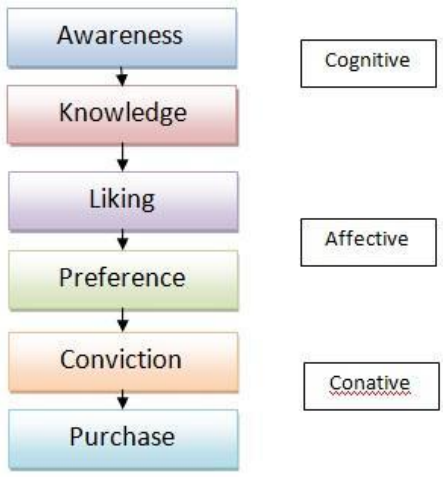


Figure 4: Hierarchy of Effects model - source: Lavidge and Steiner (1961) -

The study of Lavidge and Steiner (1961) came with interesting results regarding to the field of advertising. They found out that advertising effects can be measured in the long-term in a form of purchase. Nevertheless, to achieve something (action or result) in the long-term, something must happen in the short-term as well. The model above visually shows (in logical order) which steps are necessary before reaching the last and most important step: ‘purchase’ (Lavidge & Steiner, 1961). Around the 1980’s-1990’s the well-known ‘Customer Journey’ came up and several different versions were developed. Mapping the journey and off- and online touch-points became more important than ever, since it is important to determine which marketing expenses and activities are needed at what time and/or stage. According to a study of Wolny and Charoensuksai (2014) the traditional (marketing) funnel is dead and the loop which is comparable to the CDJ is the modern theoretical applied model. This study also emphasizes the explosion of mobile technologies and social media, made multi-channel (off- and online) shopping possible. Furthermore, this means that this journey needs to be mapped and be understood. In addition, existing consumer decision making models were developed in the early or pre-internet years, which is before the introduction of the World Wide Web in 1991 (Computer Hope, 2018). As earlier mentioned the CDJ model (Figure: 1) came up in 2009. The developers of the CDJ claim that the traditional funnel no longer functions, because it does not represent all touch points

(Court et al., 2009). Firstly, the researchers mention that it has to do with the exposure of digital channels and the increase of brand and product/services choices. Secondly, consumers' needs and demands changed over the years as well as that they are well informed (information symmetry). This CDJ was developed after a comprehensive study (20.000 consumer across five industries and three continents) which examined purchase decisions of those different consumers. The study includes the automotive industry as well which makes it important for this case (McKinsey, 2009).

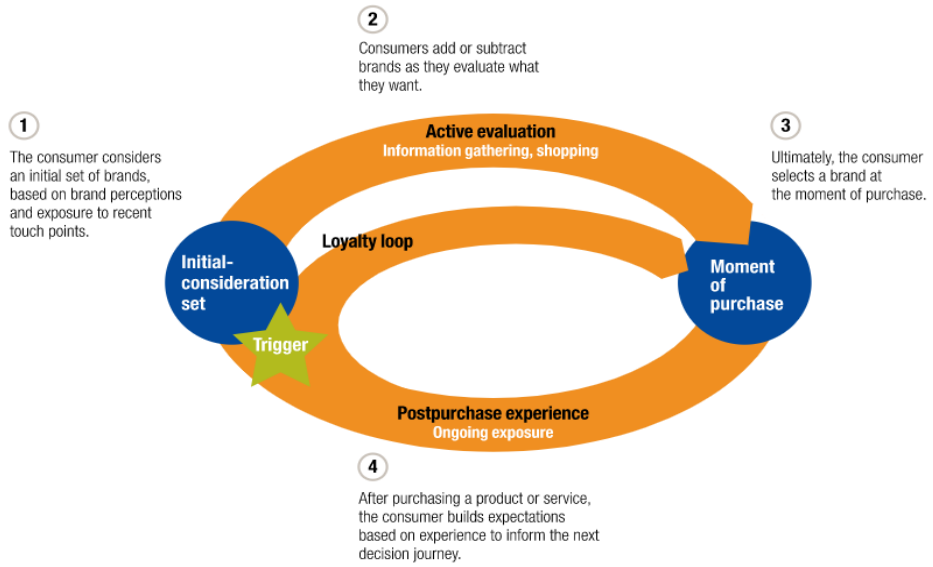


Figure 1 (repeat): Customer Decision Journey (Court et al., 2009; McKinsey, 2009)

The first stage of this model is the ''consideration phase'', which comprise the brands of which consumers are aware of before they actually start searching for information about the product and/or service. The first phase is mainly unconsciously and a number of touch points are involved. The second stage is the ''evaluation phase'', which refers to consumers are trying to evaluate their initial set of brands. Consumers search for more, additional information and compare alternative products and/or services. Furthermore, the third stage is the ''buying phase'' where people actually have to make the purchase decision. In addition, the last stage is the ''enjoy, bond and advocate phase'', also known as the post-purchase phase. In this last stage, customer satisfaction or dissatisfaction will become visible due the actions customer will make (e.g. complaints, positive/negative worth-of-mouth, 1-5-star reviews and repurchases etc.). A satisfied customer might skip the first two stages next time and will do a repurchase and/or even follow the loyalty loop (Court et al., 2009; McKinsey, 2009).

Besides the CDJ model, Vázquez, Muñoz-García, Campanella, Poch, Fisas, Bel and Andreu (2014) came up with a model that is similar to the CDJ (Court et al., 2009). The model includes the stages of awareness, evaluation, purchase and post-purchase. Nevertheless, this model is a visualised linear journey and it skips the loyalty loop, which customers might enter when he/she is satisfied with the product and/or service.

Figure 5: Customer Journey view of Vázquez et al. (2014)

In addition to the models introduced by Court et al. (2009) and Vázquez et al. (2014), Lemon and Verhoef (2016) came up with another approach. To understand the customer experience, 3 phases were introduced: pre-purchase, purchase and post-purchase.

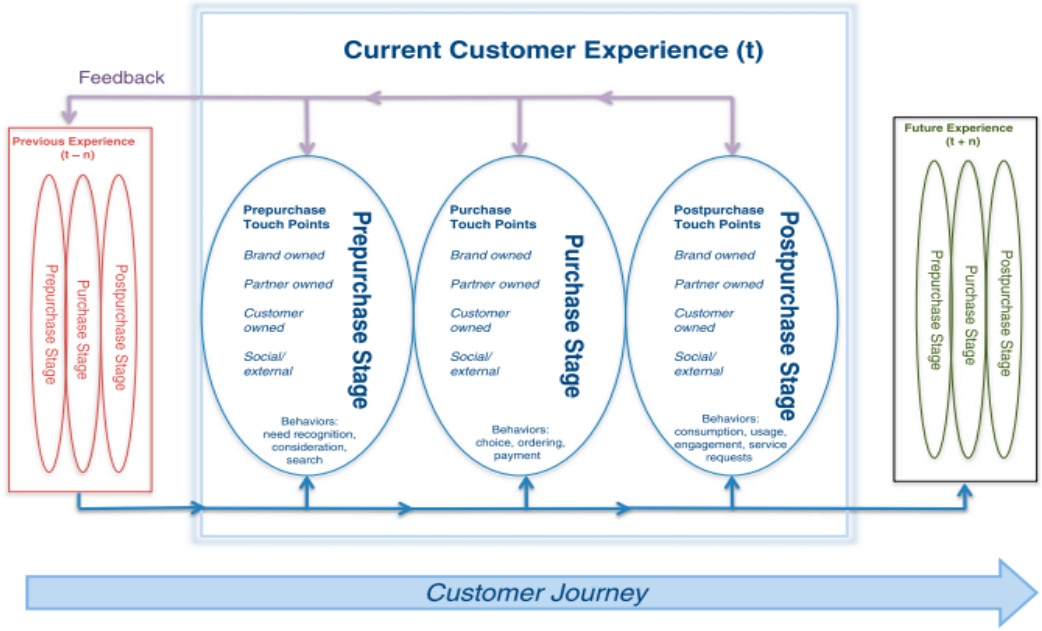


Figure 6: Process Model for Customer Journey and Experience (Lemon & Verhoef, 2016)

In this paper and research, the customer (decision) journey approach by Court et al. (2009) will be the used as main model, because other models have some defects. Firstly, most of the other models fail to indicate phases after the purchase is completed, failing to map the loop customers could enter. Moreover, the CDJ of Court et al. (2009) was based on a large study that included the automotive industry. As mentioned earlier, the evaluation stage of the customer decision journey has been identified as the most important stage for the purchase decision (Edelman, 2010). The CDJ makes it easy to map the decision-making process of customers, which are active in the automotive industry (i.e. car buyers or shared 'car' users).

According to a study of Clark (2013) a customer journey can be defined as ''a description of customer experience where different touchpoints characterize customers' interaction with a brand, product, or service of interest''. The difference between customer journeys and the customer decision models is seen below in figure 7.

Customer Journeys	Decision Making Models
– Involve every touchpoint and channel customers engage with in a shopping journey – Non-linear structure – Reflect cognitive, emotional, and behavioral drives	– Hierarchical stages customers go through to reach a purchase decision – Linear structure – Reflect cognitive drives

Figure 7: Comparison between customer journey and consumer decision-making models (Wolny & Charoensuksai, 2014)

On the other hand, Molenaar (2012) introduced an online consumer behavior model (ORCA: orientation, research, communication and action) that uses the combination of buying stages and a non-linear collection of touch-points during the decision making process. The ORCA model reveals the idea and/or concept of the 'shopping 3.0' term where consumers use multiple channels for gathering information and shopping. Most of the touch-points are interconnected without a logical or even chronological order.

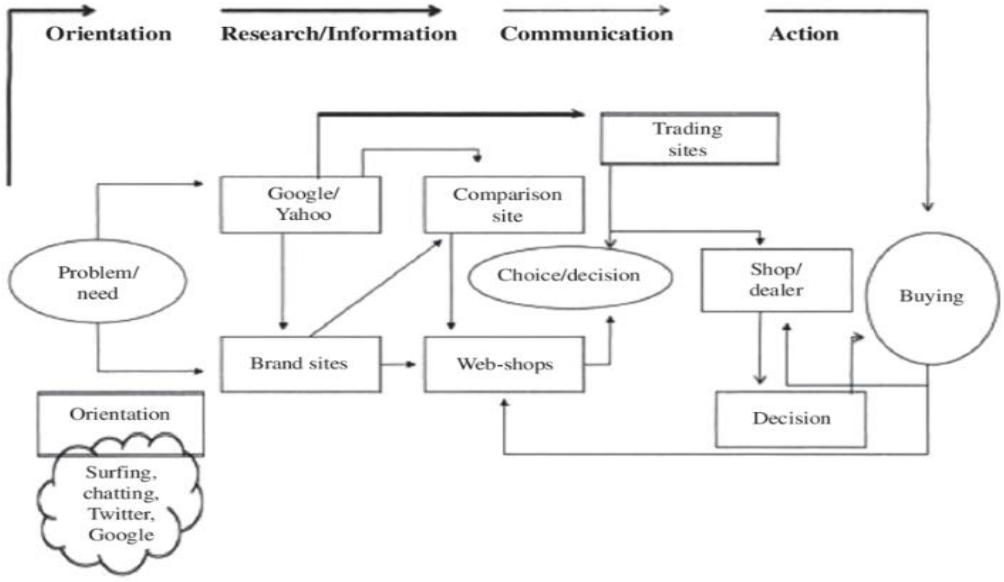


Figure 8: ORCA model (Molenaar, 2012)

Additionally, the ORCA-model brings a graphical overview with how many channels are used after problem recognition. Firstly, information will be gathered through different channels (e.g. search engines, websites and (reviewing) comparison sites). Secondly, the decision (mostly the purchase) can then be made offline (i.e. physical store) or online (i.e. trading sites). However, this model is still not academic validated and has a lack of reference to social media and mobile. Nevertheless, this model is a great and useful visualization for further purposes.

2.2.3 Review valence

One of the most discussed variables regarding the impact and/or effect of UGC and eWOM in the existing literature is 'review valence' (Cheung & Thadani, 2012). The rapid evolution and development of e-commerce and internet (i.e. web 2.0), created a possibility for online consumer reviews (CGR). This form of eWOM have become a trustful and important information source (in the past decades) through consumer purchase decision process (Chen & Jie, 2010; Dellarocas, 2003; Lin, Fang & Tu, 2010). In addition, review valence indicates the evaluation direction of a review and it could be negative, neutral or negative. When a review is in negative valence, consumers focus on the weakness of the product or service and try to warn other people about it. Nevertheless, a review in positive valence focusses on the best characteristics of the product or service. Mostly, a positive review recommends consumers to buy the product or service. Furthermore, a review with neutral valence provides information about the product or service without any direction in evaluation (Lee, Rodgers & Kim, 2009). Moreover, a lot of studies has been done already on the effect or impact of (online) reviews through the customer decision process and customer journeys.

Overall, most studies focussed on the purchase decisions consumers made and what the effect of valence was during this process. For example, Yang et al. (2016) did a study on the impact of review valence and review volume (section 2.2.4) and found that review valence has a stronger impact on consumers' perceptions than review volume does. In addition, positive reviews induce lower risk perception and more favourable attitude toward purchases in comparison with negative reviews. Several studies proved that he effect of negative reviews outweigh positive reviews (Ketelaar, Willemsen, Sleven & Kerkhof, 2015; J. Lee, Park & Han, 2008; Park & Lee, 2009). Additionally, Floh, Koller and Zauner (2013) and Herr, Kardes and Kim (1991) mention that the intensity of negativity or positivity in the reviews significantly influences buying behavior of shoppers. In line with the car sharing market due transience of the service, Vermeulen and Seegers (2009) investigated the effect of online hotel reviews and found that positive reviews have a positive effect on hotel attitude and awareness, typically for the less known hotels.

2.2.4 Review volume

Another term, variable or factor that has a significant impact on eWOM according to current literature is 'review volume'. Review volume refers to the quantity of reviews and consequently reflects the amount of information exposed to (online) shoppers (Yang, Sarathy, & Lee, 2016). Among all the information that different platforms provide for review purposes, statistics are often the first thing consumers look at and/or inspect (Y. Wu & Wu, 2016). One driver of the key statistics is review volume, which refers to the number of reviews a product, service or seller receives. Statistics (i.e. review volume) serve as an important tool for consumers to filter the huge amount of information in the decision process. In addition, Jang, Prasad and Ratchford (2012) found that review volume significantly impacts the marketing performance of a company. Furthermore, high review volume can improve and increase the awareness and exposure of a product or

service or a business. Liu (2006) found that the volume of online reviews had a positive effect on product sales, although the valence of the online reviews had no significant impact on product sales. An alternative study of Zhang, Zhao, Cheung and Lee (2014) found that a product with a higher number of (online) reviews has a higher likelihood of purchase by consumers.

Despite that a lot of marketing researchers invested much effort in studying the effects of reviews statistics (i.e. review volume and review valence par. 2.2.3), findings were somewhat inconsistent. While review valence is recognized for its positive effects on product or service pricing and sales, review volume can have a positive or negative (insignificant) influence on marketing outcomes. Those conclusions are made because most of the studies are based on the assumption that online reviews have the same impact/effect for each (different) consumer (Simonson & Rosen, 2014).

2.2.5 Attitude towards electronic word of mouth

Attitude is a relative difficult element to understand. Zainal et al. (2017, p.36) described attitude as: ‘’*a learned predisposition responding towards a certain object in a negative or positive way’’* (Casaló, Flavián & Guinalíu, 2011; Fishbein & Ajzen, 1975; Reza & Samiei, 2012). Someone’s attitude towards eWOM is mostly associated with an individual’s trust in a source. Yang and Yoo (2004) mentioned two dimensions of attitude, referring to cognitive and affective attitudes. Affective attitude is referring towards the extent to which a certain individual likes an object and cognitive attitude is referring towards an individual’s belief about it.

Attitude is widely investigated in different contexts, mostly to explain or predict consumer behaviors (Casaló, Flavián & Guinalíu, 2010). Studies which implement attitude focussed mainly the influence/impact of attitude on search intentions (Lee, Qu & Kim, 2007), travel intentions (Di Pietro, Di Virgilio & Pantano, 2012; Jalilvand & Samiei, 2012; Reza Jalilvand, Samiei, Dini & Yaghoubi Manzari, 2012), purchase intentions (Cheung & Thadani, 2012), intention to use (Muñoz-Leiva, Hernández-Méndez & Sánchez-Fernández, 2012) and even intention to participate in an online travel community (Casaló et al., 2010), intention to follow online travel community advice (Casaló et al., 2011) and intention to go to festivals (Lee, Xiong & Hu, 2012). Several researchers even focussed on the effect of environmental knowledge on green purchase intention, with the mediating role of attitude towards green products and found a full mediation effect (Lizawati Aman, 2011; Harun, 2012).

In a travel setting, Ayeh. Au and Law (2013) found that the attitude of travellers had a positive (direct) effect on the intention to follow eWOM. Bahtar and Muda (2016) found that a favourable attitude has positive influence on purchase intentions/decisions and has substantiated this with the studies of (Jun & Jafaar, 2011; Laforet & Li, 2005; Li & Zhang, 2002). Several studies had been done on the impact of eWOM on consumers attitudes, Siahailatua (2010) found on the other hand that consumer knowledge and communication trust in line with eWOM engagement had great impact on consumers attitudes. Hennig-

Thurau et al. (2004) investigated the motivations behind eWOM engagement throughout the internet and found the factors behind the eWOM engagement, such as advice seeking, social benefits, economic advantages etc. Furthermore, Porter (2017) even focussed on differences between WOM (word-of-mouth) and eWOM on consumer purchases related attitudes and found that several factors as source, channel, audience had significant explained the relationship with attitude toward the messages and products and even purchase intentions. Attitude is an often-used variable for explanation of the independent variables on the dependent variables. For example, more in line with attitude towards eWOM Zainal et al. (2017) focussed on the mediating effect of attitude on the relation between trust in eWOM source and intention to follow eWOM. Zainal et al. (2017) found significant results, a situation where attitude partially mediates the relationship between trust in eWOM and intention to follow it.

2.2.6 Purchase intention and decision

Purchase decision is referring to a sequence of choices formed by a certain consumer before making a purchase, which starts once he/she has a willingness to fur fill a certain need. Such decisions are mostly based on factors as amount of money, payment method, time to buy, place of purchase, a (brand) preference and purchase quantity/quality. Marketing managers can influence the decisions by providing information about the products and services. According to Schiffman and Kanuk (2007) consumers search for consumption-related needs based on past experiences before looking at other sources. Summarizing this, consumers first rely on the past purchase experiences (internal sources) before actually involve other sources that can influence their decision. Marketing as well as non-commercial activities likely influenced past consumer behavior (Schiffman & Kanuk, 2007). Earlier research also found that consumers would like to minimize the risk associated with a decision (Chaipradermsak, 2007). Blackwell, Engel and Miniard (2001) mentioned that, in order to understand consumers' purchase decision, marketing managers must understand the consumption process and the benefits of the products and services in their mind. Purchase decision is in line with the earlier described customer (decision) journey, it is the phase that comes after the pre-purchase phase and before the post-purchase phase.

According a study of Eagly and Chaiken (1993), purchase intention reflects a conscious plan in the effort to purchase a certain brand. Environmental as well as individual characteristics could influence consumers' purchase decisions (Kwan, 2006). In addition, Jalalkamali and Nikbin (2010) mentioned that in a difficult business environment, consumers usually base their purchase decisions on factors as price, quality, brands, (e)WOM and previous experiences. Furthermore, the measurement of purchase intentions has mostly been used to identify niche markets and potential product innovations. However, future purchase intention behavior is hard to predict with just some data. For example, Ferraz, Buhamra, Laroche and Veloso (2017) mentioned that some factors can help control or just even help understand the influence and predictive accuracy of purchase intentions.

2.2.7 Products and services

Products and services differ from each other in every possible form even though they may also have similarities (for example, both are tradable). Services can be defined as interactive, intangible, personal, heterogenous, perishable and simultaneity consumption. For products the opposite characteristics can be classified (Parry, Newnes & Huang, 2011). Gadrey (2000) found is his study that services and goods overlap with each other, products are provided with services and services are mostly provided with or by products. (Vargo & Lusch, 2008; Lusch & Vargo, 2004, 2006) did a lot of research on the well-known theoretic terms "service-dominant logic'' and ''goods-dominant logic''. SD-logic refers to a customer (two-sided) view and GD-logic refers to a product view (one-sided). In addition, the researchers wanted to emphasize that all products as well as services are meant for offering 'service' to a consumer.

However, some research has been done on product and service differences (in the field of marketing). Subsequent, there is not a lot research on the (differences) between products and services in the automotive/transportation field. Instead of this and in line with the empirical context of this thesis, some research has been done already on car ownership (product) and car sharing (service) with emphasize on definitions, (dis)advantages, changes and differences. Hawapi, Sulaiman, Abdul Kohar and Talib (2017) focussed on eWOM in line with collaborative car sharing intentions and highlighted several scale items and relations for further research. The effects of eWOM on sharing intentions is relatively new.

In line with the automotive empirical context, Burghard and Dütschke (2019, p.1) defined carsharing as: '*'services where cars are provided by an organisation and used by a group of individuals, usually in exchange for a fee, as a form of shared mobility*''. The definition of ''shared mobility'' refers to several transportation modes that are shared on as-needed basis (Shabeen, Cohen & Roberts, 2016). More in detail on this definition, other services as sharing rides (lifting other people) and carpooling (where companies or individuals share their vehicle in times when they don't need it) fall within the shared mobility field as well. Furthermore, on a broader level Burghard and Dütschke (2019) focussed on how individuals distinguish in car sharing adoption behavior.

More interesting, Burkhardt and Millard-Ball (2006) focussed on attractiveness of carsharing (service) instead of car buying (product) and mentioned that car sharing has some advantages as: increased mobility and reduced vehicle traveling. In addition, car sharing is linked to several demographics, interested groups are for example: social activists, environmental protectors, innovators, economizers or practical travellers. Furthermore a recommendation from this study, car sharing companies could increase memberships by correctly targeting those (demographic) groups. Last but not least, Burkhardt and Millard-Ball (2006) told in their study that several different demographic factors as gender, age, income have different outcomes on choice preferences within the mobility industry. Also, reasons to prefer car sharing were lower costs, less environmental pollution and support of the overall philosophy. Another study on car sharing preferences by

Paundra, Rook, van Dalen and Ketter (2017) investigated the effects of price, parking convenience, car type and psychologic ownership on intention to select a car and found that those factors had significant impact.

Over the years 'product' marketing changed more towards 'service' marketing, where consumers prefer services and want to see the value and the convince of it. The ''shared economy'' referring to an economy where sharing is more important than owning, mentioned by Tang (2019) is growing fast. Furthermore, the Transportation Research Board and National Academies of Sciences (2005) mentioned the importance and advantages of car sharing as well. The societal shifting that is happening worldwide (e.g. climate: pollution and reduction) increased the car sharing demand. In addition, economic advantages (e.g. less tax, parking and insurance) also contributes to the increasing demand. Nijland and Van Meerkerk (2017) have shown the climate advantages with pollution reductions and Shabeen, Cohen and Roberts (2018) confirmed to explosive growth of the car sharing market.

Bringing together, Baker (2001) and Cox (1967) noticed that consumers experience pre-purchase doubts from the purchase and usage of a product. Because the quality and amount of information is diminished in cases of intangible services, the perceived risk regarding to services is expected to be higher (Levitt, 2016; Murray, 1990). Zeithhaml (1981) mentioned further that, a consumers' perception of quality mostly relies on tangible evidence as well as price (instead of service). Murray (1990) further investigated perceived (overall, financial, social, performance, convenience, psychological and physical) risk between product and services and found that, overall there was no difference in risk between the products and services. In general, the conclusion was that consumers perceive services more riskier than goods and the elements that supported this finding were social risk (support), financial and performance risk (partial support).

2.2 Literature overview

In this part a chronological approach will be used in order to note the most important and related studies that are in line with this thesis. The studies in the table below (Table 1) focus on eWOM alongside UGC. This part is additional on the earlier described theoretical background. For example, I will describe what the researchers focussed on and what variables they used and what the most important findings were.

Table 1: Summary (important) regarding UGC and eWOM

Author / Date	**Topic / Focus / Question**	**Concept Theoretical Model**	**Measurement / Method**	**Important Findings**
Chevalier and Mayzlin (2006)	Effect of UGR volume and valence on sales	IV: review volume and review valence DV: book sales	Data of specific book title sales (1636 titles) were gathered from big e-commerce stores as Amazon.	(1) Significant positive/negative reviews (over time increasing) impact on book sales
Liu (2006)	Effect of eWOM on sales	IV: review volume and review valence DV: movie sales	Data of Yahoo! Movies to examine patterns of WOM and how it helps explain box office revenue. 376 observations of weekly data of 40 movies.	(1) Review volume had a significant positive effect on ticket sales (2) Review valence had no significant effect on the sales
Duan et al. (2008)	Dynamics of eWOM and product sales	IV: review volume and review valence DV: product sales	Data was gathered through different online stores in order to measure the effect of UGC on sales in the movie industry. A dynamic simultaneous equation system was used in order to separate the effect of eWOM as a precursor and outcome of retail sales .	(1) review valence and movie sales had effect on the volume of reviews that had been posted (2) the effect of movie sales on review valence disappears fast in coming periods after introduction of a movie
Vermeulen and Seegers (2009)	Impact of Online Hotel Reviews on Consumer Consideration	IV: review valence, reviewer expertise and product familiarity DV: product awareness, attitude and consideration	A 2 (valence: positive or negative) x 2 (hotel familiarity: well known or less known) x 2 (reviewer expertise: expert or non-expert) experiment was conducted in order to measure the influence of reviews on hotel consideration. Total 168 respondents acquired.	(1) exposure of online reviews increased product awareness, with a greater impact for less known hotels and/or products (2) negative/positive review valence had a greater (negative/positive) effect on product attitude, here also a greater effect for less known hotels (3) hotel consideration was significantly increased by exposure of online user reviews and positive valence had a significant positive impact on product consideration (4) expertise of the reviewer created a positive effect on product consideration
Yaylc and Bayram (2012)	E-WOM: The effects of online consumer reviews on purchasing decisions	IV: several online review determinants DV: purchase decision	A self-administered survey questionnaire was developed and administered to 604 scholars that were randomly selected from Turkey	(1) significant main effects of the reading reviews before purchasing and buyers' purchase frequency (2) number of reviews have a significant effect on buyers' purchasing decision due the increases of the perceived popularity of a product

				(3) participants agree to characteristics of reviews that are effective on purchasing decision. Specifically, consistency and recency of reviews are more effective on purchasing decision (4) other reviewers' rating of usefulness of the review is regarded as an important factor that influences the buyers purchasing decision
Wu (2013)	Relationships among Source Credibility of Electronic Word of Mouth, Perceived Risk, and Consumer Behavior on Consumer Generated Media	IV: source credibility of eWOM factors (perceived risk) DV: purchase intention and eWOM involvement	A self-administered survey on potential independent travelers, total 261 responses	(1) The higher the expertness of eWOM is, the lower degree of the perceived risk the consumer has. (2) The higher the trustworthiness of eWOM is, the lower degree of the perceived risk consumer has. (3) The higher the trustworthiness of eWOM is, the lower degree of the perceived risk consumer has. (4) The lower degree of perceived risk the consumer has, the higher consumers' trust is.
Mayzlin, Dover and Chevalier (2014)	The effect of promotional reviews	IV: hotel reviews DV: value / rating (scores)	Comparing hotel reviews of two different hotel websites (Expedia.com and TripAdvisor.com) by looking at different factors as: star rating, neighbor (yes/no), small or large owners.	(1) small hotels had a significant greater amount of fake reviews on TripAdvisor.com, so manipulation behavior was greater for small hotels (2) a hotel, which is located near an independent hotel (owned by a small owner) has a higher amount of fake reviews in comparison with isolated hotels
Abdelaziz, Aziz, Khalifa and Mayouf (2015)	Determinants of Electronic word of mouth (EWOM) influence on hotel customers' purchasing decision	IV: several eWOM determinants DV: Customer purchase decision	500 randomly chosen consumers that enjoyed hotel quality time in Egypt. 368 valid replies were gathered	(1) Source expertise, source trustworthiness, receiver expertise, eWOM volume, eWOM valence, type of website and nature of product/service. The eWOM elements had a positive significant impact on purchasing decision (2) Tie strength had a significant negative effect on purchasing decision and homophily had no significant negative effect
Ballantine and Au Yeung (2015)	Effects of review valence in organic versus sponsored blog sites on perceived credibility, brand attitude, and behavioral intentions	IV: review valence and blog source DV: product attitude, purchase intention, perceived credibility, information sharing intention and degree of parasocial	A 3 (review valence: positive, negative and neutral) x 2 (blog source: organic or sponsored) experiment study was held. A survey gathered 228 complete responses.	(1) that blog source and review valence had no significant impact on either one of dependent variables (2) negative valence reviews led to a significant lower brand attitude and purchase intention in comparison with neutral or positive valence reviews
Wang (2015)	Effect of YouTube (UGC) on purchase intention	IV: Perceived credibility DV: Purchase intention	Online survey with 131 responses to investigate the effect of perceived credibility on purchase intentions	(1) The more positive attitude toward UGC the viewers had, the more likely that they would buy the products that were recommended by the vlogger (2) positive users and passive users had significant differences in attitude toward UGC and the likelihood of purchase intention
Bahtar and Muda (2016)	The Impact UGC on Product Reviews	IV: online and offline marketing Moderators:	They held a survey and wanted to investigate several mediation (perceived usefulness	(1) UGC is considered as more trustworthy and useful and less unbiased (based on consumer experiences)

	towards Online Purchasing	perceived risk Mediators: perceived credibility and usefulness DV: online purchase intention	and perceived credibility) and moderation effects (perceived risk) on online purchase intentions	(2) UGC greatly impacts an individual's purchasing behavior and decision
Yang et al. (2016)	Effect of review volume and review valence on purchase decisions	IV: review volume and review valence Mediators: perceived risk, attitude, subjective norm DV: purchase intention	The effects of review valence and review volume were tested by a 3 (valence: positive, neutral or negative) x 2 (volume: high and low) study. The information was gathered through this quasi experimental design and online questionnaires	(1) review valence has a stronger impact on consumers' perceptions than review volume does (2) negative reviews induce a higher risk perception and a less favourable attitude toward purchases compared to positive reviews
Constantinides and Holleschovsky, (2016)	Impact of online product reviews on purchasing decision	IV: credibility and usability characteristics DV: purchase decision	A survey with a total population of 422 was sent out to those 422 consumers, 50% of those respondents answered completely (211).	(1) reviews are highly popular among consumers who consider a purchase. In addition to this, online reviews influence consumers' purchase decisions only when consumers' reliance on online reviews is sufficiently high when they make a purchase decision (2) the amount of reviews on a certain product increases the credibility of reviews and platforms (3) a few or some credibility as well as usability characteristics have influence on consumers' purchase decisions
Panne (2017)	On- and offline marketing effects in consumer decision making process stages	IV: online and offline marketing Moderators: age, gender, geographical area and education level DV: decision making stages	525 respondents filled in a survey, which was sent through e-mail to customers of BMW in the Netherlands	(1) social media channels do not play a big role in the decision making process of Dutch automotive consumers. In addition, age plays a role because, the older consumers are the more they rely on the importance of social media (2) the importance of the website of a company decreases through the decision process (3) email is perceived as moderately important during all the decision making stages. (4) contact with the sales representative and a test drive were the most important factors during the CDJ of Dutch automotive consumers
Vellios (2018)	Effect of UGC for car buyers in the evaluation stage of the CDJ	IV: review volume and review valence Moderators: perceived source credibility DV: evaluation of alternatives	A total of 167 respondents filled in a survey, which had been distributed through social media and car related forums	(1) valence had an significant effect on the evaluation stage of a car buyer. In addition, a majority of negative valence reviews a product (car) is evaluated negative, for positive valence reviews the opposite happens (2) review volume had no significant effect on the evaluation of alternatives, which was not expected. (3) valence and volume had a significant interaction effect on the evaluation of alternatives. (4) perceived credibility had a positive moderating effect between review volume and evaluation of alternatives.
van Gils (2018)	Effect of online reviews on	IV: review valence and content	An online experiment survey was carried out	(1) content created on social media (e.g. Instagram) and which contains a positive tone will result in higher purchase

	purchase intention	source Moderators: content usefulness Mediators: perceived credibility DV: Purchase intention	and 128 reactions were received	intentions, for negative tone content the opposite happens (2) as the value of content usefulness increases the relationship between content valence and purchase intentions increase (3) the more content is perceived as credible, the more useful the content become.
Nosita and Lestari (2019)	The Influence of User Generated Content and Purchase Intention on Beauty Products	IV: UGC attitude, perceived credibility DV: purchase intentions	200 responses of consumers above the age of 18 and viewed at least 1 beauty video on YouTube	(1) user activity at UGC on YouTube does not influence purchase intentions

2.3 Conceptual model

The following conceptual model (Figure 9) has been created. The model shows the supposed effect for each of the independent variables (UGC volume and valence) on the dependent variable (purchase decision). The other independent variable choice type for (product or service choice) is operating as a moderator variable[3]. Attitude towards eWOM serves as mediator since it can explain the relationship of eWOM on (purchase) decisions. Each of the control variables (age, gender, income, education) could have influence on the dependent variable and is connected with the independent variables. The control variables will be used as well for further statistical analysis.

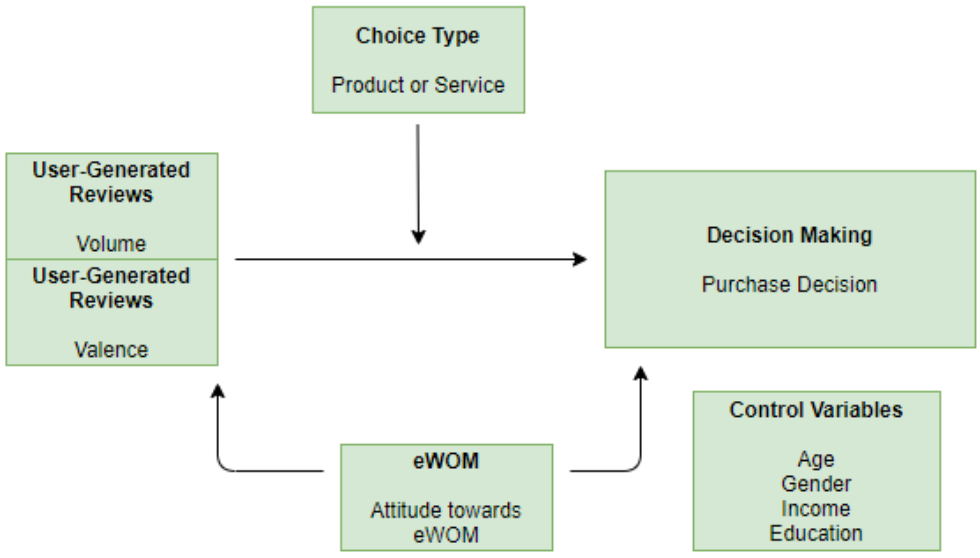


Figure 9: Conceptual Model

[3] To clarify: the variable **Choice Type** is referring towards choosing a **product** (car purchase) or **service** (shared car) and whereby 0 = a car purchase and 1 = use a 'shared' car

2.4 Hypotheses formulation

In cooperation with the conceptual model, several hypotheses are formulated. Earlier in the theoretical background and literature overview, quite a lot of research on the impact of eWOM alongside user-generated content has been mentioned. The earlier literature and findings will be used through the hypothesis's formulation. To begin, eWOM studies that investigated the effects of eWOM on purchase decisions and intentions, helped to create hypothesis's regarding the main effects for this empirical context.

Findings for review valence were consistent. In several studies, which investigated the effect of review valence on other dependent variables than purchase intentions the findings were in line. Firstly, that negative valence content has a more strong negative impact compared to that positive valence content has a positive impact (Floh, Koller & Zauner, 2013; Herr et al., 1991; Ketelaar et al., 2015; Lee et al., 2009; Park & Lee, 2009; Yang et al. 2016). Secondly, that positive content valence has a positive effect on sales (Chevalier & Mayzlin, 2006), attitudes and awareness (Vermeulen & Seegers, 2009), evaluation of alternatives (Vellios, 2018) and purchase intentions (van Gils, 2018). Both, Liu (2006) and Ballantine and Au Yeung (2015) found no significant effects of content valence. Liu (2006) focused on the impact of content valence on sales and Ballantine and Au Yeung (2015) focused on the impact of content valence on attitudes as well as purchase intentions. However, both studies found no significant effects of content valence.

Hypothesis 1a: The quality (valence) of online reviews positively affects consumers' purchase decisions

Findings on review volume were more inconsistent. Several studies found positive significant effects of review volume on sales (Chevalier & Mayzlin, 2006; Liu, 2006), marketing performance (Jang et al., 2012), purchase likelihood (Zhang et al., 2014) and improvement of awareness and exposure of product and services (Liu, 2006). Vellios (2018) found no significant effect of review volume on the evaluation of alternatives. Based on those findings, there is assumed that review volume positively affects consumers (purchase) intentions/decisions.

Hypothesis 1b: The quantity (volume) of online reviews positively affects consumers' purchase decisions

As mentioned earlier in the theoretical background on product and services, today consumers find themselves increasingly in a service economy (Shabeen et al., 2016; Tang, 2019) . For example, the increasing 'shared mobility' and increasing sharing consumers show this facts (Burkhardt & Millard-Ball, 2006; Nijland & Van Meerkerk, 2017; Shabeen et al., 2018). Focussing on products and services, Zeithhaml (1981) mentioned that, a consumers' perception of quality mostly relies on tangible evidence as well as price. Instead, Murray (1990) found that risk is mostly higher for services in comparison with products and factors as social, financial and performance risk factors supported this finding. Burkhardt and Millard-Ball (2006) had also shown the advantages of car sharing and that demographic factors (age, income, gender etc.)

have different outcomes on choice preferences. Paundra et al. (2017) confirmed findings on the advantages of car sharing due to parking convenience and less costs. Furthermore, Baker (2001) and Cox (1967) noticed that consumers experience pre-purchase doubts from the purchase and usage of a product. Because the quality and amount of information is diminished in cases of (intangible) services, the perceived risk regarding to services is expected to be higher (Levitt, 2016; Murray, 1990). Above, the findings were somewhat inconsistent, meaning that in 1990's and early 2000's the risk regarding services was higher. Today the information streams for services and products increases, thus normally the risk regarding products should be higher. Information facilities increased, services are easier to acquire and products are mostly more expensive.

Bringing these insights together with all earlier literature on eWOM/UGC, the year of 2020, the risk regarding product purchase is higher in comparison with services. Thus, there is assumed that people rely more on eWOM when making a product choice.

Hypothesis 2: Choice type moderates the relationship between eWOM and purchase decisions
Hypothesis 2a: Choice type moderates the relationship between online review quality (valence) and purchase decisions
Hypothesis 2b: Choice type moderates the relationship between online review quantity (volume) and purchase decisions

According to the literature study, attitude towards eWOM is an interesting element as well in the field of eWOM/UGC. Attitude in general is used in a lot of different studies, mostly as independent or mediating variable. In most of the studies, which investigated the effect of attitude on several different intentions found positive effects of attitude on intentions (Casaló et al., 2010, 2011; Cheung & Thadani, 2012; Di Pietro et al., 2012; Jalilvand & Samiei, 2012; Lee et al., 2007; Reza Jalilvand et al., 2012). Bahtar and Muda (2016) mentioned that a favourable attitude has positive influence on purchase intentions/decisions. (Lizawati Aman, 2011; Harun, 2012) both found a full mediation effect in a context where the effect of environmental knowledge on green (purchase) intention. In the marketing field, Zainal et al. (2017) found a partially mediation effect of attitude on the relationship between trust in eWOM and intention to follow it. Nevertheless, despite all studies in other fields and findings there is assumed that here also, attitude towards eWOM is mediating the relationship between eWOM (valence and volume) on (purchase) intentions/decisions.

Hypothesis 3: Attitude towards eWOM mediates the relationship between eWOM and (purchase) decision
Hypothesis 3a: Attitude towards eWOM mediates the relationship between review valence and (purchase) decision
Hypothesis 3b: Attitude towards eWOM mediates the relationship between review volume and (purchase) decision

3. Research Methodology

3.1 Research design & method

3.1.1 Purpose of the study

The purpose of this paper was to reveal the effects of eWOM quality and quantity on purchase decisions in an automotive/transportation choice (product or service) context. In summary, this study is conducted in order to test hypotheses regarding the relationship between CGR and purchase decisions with emphasize on effect differences for products and services. Furthermore, this paper is more in line with conclusive research. According to Malhotra and Birks (2007) the objective of conclusive research was to describe specific phenomena, to test specific hypotheses and examine specific relationships. The overall objective of this study was to describe the car (purchase/sharing) behaviour and related earned marketing (eWOM and UGC) consumption of consumers in the Dutch automotive/transportation industry.

3.1.1 Research method

This research has a descriptive nature, which is a form of conclusive research (Malhotra & Birks, 2007). Despite, data is collected by one sample, which means that this research can be seen as single-cross sectional design (Malhotra & Birks, 2007). In quantitative research there are four main types of design. Since this paper, doesn't manipulate any variable and just test relationships and distribution of the variables, a correlational approach is applied (Winston-Salem State University, 2019). Sometimes correlational research is considered as a type of descriptive research, and not as its own type of research, as no variables are manipulated. Furthermore, this study has a deductive approach, which means that the used literature lead to several hypotheses. Thereafter, the hypotheses have been tested with data, which has been gathered through a self-administered survey. Last but not least, conclusions have been made regarding support or resistance for the lined up hypotheses.

3.2 Questionnaire and distribution

3.2.1 Online survey

In order to test and answer the hypotheses and (sub)research questions, primary data must be collected. Primary data makes it possible to test the relationship between the independent on the dependent variables. In case of this paper, primary data was collected through internet surveys. According to Malhotra and Birks (2007), online surveys have several advantages. Firstly, interviewer bias is completely vanished, which has a positive impact on the reliability of the answers given by respondents. Secondly, an online survey makes it

possible to build in skip patterns, which creates the ease for respondents to skip certain questions that they prefer not to fill in or are hard to answer directly (Malhotra & Birks, 2007). Disadvantages of online surveys are that respondents can give fake answers and that not all people are available for online surveys.

3.2.2 Sampling method and distribution online survey

In this paper, the simple random sampling method has been used to select the sample for this research. This method is appropriate due to limited resources and time (Malhotra & Birks, 2007). In addition, this method creates insights that are generalizable. In order to test the relationships between the variables an online survey in Dutch language has been set up and spread. The survey has been spread through online media channels and other social groups (related to car consumers) with various demographic characteristics. Car sharing customers were harder to find (hard-to-reach), thus I had to do more effort in order to reach those people (Shaghaghi, Aziz Sheikh, Raj S Bhopal, 2011). Since I have a network in the automotive industry, I asked people (through different channels) if they know people who used a 'shared' car. In addition, the snowball sampling method helped to reach more and more people, even when this is a non-probability sampling method. This method supported the simple random sampling method in order to create more traffic towards the survey. Distribution of the online survey has been done through social media (Facebook, LinkedIn). Furthermore, (old) colleagues, friends, customers at work and forums helped to achieve response.

After the survey was created, I started a pilot with the questionnaire and chose 10 people who were willing to test the survey in order to detect potential problems within it and if necessary solve problems. If the response was quite low after the first 2 weeks after placement, an incentive would be designed to reach the desired number of people. At the end it was necessary to introduce an incentive, which helped me to achieve extra responses.

3.2.3 Target sample

The target population (samples) of this study are the people, which purchased a car and/or used a 'shared' car in the past three years. A (filter) question identifies whether the respondents purchased or used a 'shared' car in the last three years, so that the survey will be held under the right population.

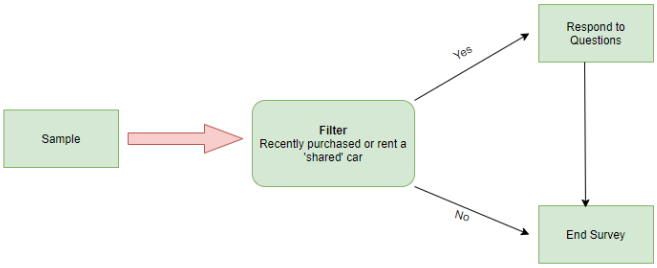


Figure 10: Sample filter

According to Statistics Netherlands, the amount of personal cars is increasing fast, in 2019 a number of 7.53 million personal cars were registered on name (Statistiek, 2020). Furthermore, the car sharing market is becoming more popular as well. For example, SnappCar had 700.000 users in 2017 (Dutch Cowboys, 2019). In addition, research of (Crow Knowledge Platform, 2019) had shown 51.149 active 'shared' cars in the Netherlands. SnappCar, MyWheels, ConnectCar, StudentCar, GreenWheels, Stapp.in, OproepAuto, Witkar, Car2Go are the biggest players in the 'shared' car market, an estimation of 1.5 million users in the 'shared' car market. The total population includes 9 million people in the Netherlands, which is quite a lot (around 52.9% of the Dutch population). People below the age of 18 had to be excluded.

According to an online sample calculator, 385 responses had to be achieved for reliable and generalizable results/findings[4]. The calculation made clear that 385 or more measurements/surveys were needed to achieve a confidence level of 95%, meaning that the real value is within ± 5% of the measured/surveyed value. A total of 177 responses were achieved within 3 weeks. More response was always usable and even better, but due time and budget constraints this was restricted (Calculator, 2020).

3.3 Measures and operationalization

To achieve the study goals, a self-administered survey questionnaire has been developed in line with the literature that has been found. The survey contains several different parts. (1) a filter question for actually participating, (2) demographic variables and (3) measurement items for each variable.

Information for each of the variables has been gathered through a self-administered survey. Most of the variables were measured as continuous in a 5-point Likert-scale. This study aimed to use existing and frequently used scales by other (literature related) researchers. Searching for reliable scales, means that the Cronbach's alpha from related existing studies needed to be used to see if the items in that specific study were internal reliable (> .70). According to Field (2009) a Cronbach's alpha is a measure of internal consistency, it measures how closely a set of items are related to each other. IBM SPSS Statistics version 26 will be used in order to calculate the Cronbach's alpha values for this study

Thorough research has been done to find other reliable and consistent measuring instruments in the field of eWOM and mainly related towards online reviews, which have been used and implemented in this study. Most of the questions were applicable in an experimental setting for certain branches as automotive, travel, restaurant and so on. For this study an experimental setting was not appropriate (e.g. review volume manipulation) and necessary (e.g. conclusive research). Thus I looked for usable existing measurements in line with the conceptual model, which focusses on the effect of eWOM on purchase intentions and the role of product or service choices within this effect.

[4] The calculator used a population size of 9 million (N = 9.000.000), a 95% confidence interval and 5% margin error

3.3.1 Measurement items

In this section each of the variables are described in detail. In addition, each table below the text shows in detail how each item is operationalized.

eWOM volume (quantity)

Except that several studies used experimental designs in different branches, a study that used a similar methodological approach was found. Lin, Wu & Chen (2013) did a similar (moderating) study where the effect of eWOM valence and volume on purchase intentions with a moderating role of product involvement and brand image. A few measurement scales could be used, especially or eWOM quantity.

Regarding the measurement of eWOM quantity, four items of Park and Kim (2008) and Park and Lee (2008) were adapted in the study of Lin et al. (2013). In addition, Abdelaziz et al. (2015) focused on the influence of several eWOM determinants on hotel customers' purchase decision and found interesting overlapping questions with the study of Lin et al. (2013). Abdelaziz et al. (2015) used measurement items for eWOM volume from El-Desouky (2011) and Lin et al. (2013) and achieved a Cronbach's alpha score of .817. In order to measure eWOM volume, four questions on a 1-5 Likert scale adopted from the study of Abdelaziz et al. (2015) have been used and modified properly, to fit our model. Table 2 shows exactly how the questions are formulated and operationalized.

Table 2: Operationalization of review volume

Variable	Question(s)	Scale	Operationalization
Review volume	1. ''The number of online reviews/comments is large, inferring that the product/service is popular''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	2. ''Highly ranking and recommendation, inferring that the product/service has good reputations''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	3. ''The more the product/service is mentioned in front of me the more it influences my purchasing decision''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	4. ''The more the product/service is discussed in front of me the more it influences my purchasing decision''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

eWOM valence (quality)

In order to support the eWOM valence measurement scales, Abdelaziz et al. (2015) used the scale of Yaylc and Bayram (2012) that investigated the effects of online reviews on purchase decisions. In this study the questions were changed towards a (modified) hotel settings and whereby a Cronbach's alpha of .785 was achieved. To measure eWOM valence, three questions on a 1-5 Likert scale adopted from Abdelaziz et al. (2015) have been used. In addition, Abdelaziz et al. (2015) used the scales of Yaylc and Bayram (2012) to conduct the research. The questions are modified properly for this context, to fit our model. Table 3 shows exactly how the questions are formulated and operationalized.

Table 3: Operationalization of review volume

Variable	Question(s)	Scale	Operationalization
Review valence	1. ''I rely on reviews with very high or very low ratings for the product/service''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	2. ''I rely on consistent reviews even positively or negatively''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	3. ''(Overall product/service) rankings help me to quickly select the best choice among several alternatives''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

Purchase decision

For purchase decision, Abdelaziz et al. (2015) referred to the studies of Wu (2013) and Yaylc and Bayram (2012) in order to find a reliable measurement items. Abdelaziz et al. (2015) found a Cronbach's alpha score of .852 in the study. In order to measure purchase decision, four questions on a 1-5 Likert scale adopted from the study of Abdelaziz et al. (2015) have been used and modified properly, to fit our model. Table 4 shows exactly how the questions are formulated and operationalized.

Table 4: Operationalization of purchase decision

Variable	Question(s)	Scale	Operationalization
Purchase decision	1. ''Previous reviews on the product/service affect my willingness to make a (purchase) decision''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	2. ''When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	3. ''I choose my product/service upon reviews which I read''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	4. ''Information I receive online influence my purchase decision''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

Attitude towards eWOM

For attitude towards eWOM several studies were compared in order to find the best fitting measurement items. Zainal et al. (2017) used a reliable set of measurement items, which recently is used by Akram (2020) as well. The Cronbach's alpha was .902 in this study. In order to measure attitude towards eWOM, four questions on a 1-5 Likert scale adopted from the study of (Zainal et al., 2017) have been used and modified properly, to fit our model. Table 5 shows exactly how the questions are formulated and operationalized.

Table 5: Operationalization of attitude towards eWOM

Variable	Question(s)	Scale	Operationalization
Attitude towards eWOM	1. ''I have a positive opinion about the reviews obtained online''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	2. ''I think following the reviews obtained online would be beneficial for me''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

	3. ''Overall, my attitude towards the reviews obtained online is favourable''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	4. ''I like the reviews obtained online''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
	5. ''I think following the reviews obtained online would be good for me''	Ordinal (semi-continues)	1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree

Control variables

Several demographics were used in order to use them as control variables within the regression analysis. Age, gender, income and education could have effect on the outcomes, so in order to measure them an original demographic scale has been used. Age, has been measured as scale variable, where later if necessary a recoding could take place to an ordinal scale. Gender, has no ranking, so it has been measured as nominal variable. Both, income and education, have been measured as ordinal scales. The demographic questions are mentioned below and includes the answer categories. Table 6 shows exactly how the questions are formulated and operationalized.

Table 6: Operationalization of the control variables

Variable	Question(s)	Scale	Operationalization
Age	What is your age?	Scale (ratio)	Open (fill in)
Gender	What is your monthly (gross) income?	Ordinal	1 = Less than €1000, 2 = €1000 - €2000, 3 = €2001 - €3000, 4 = €3001 - €4000, 5 = €4001 - €5000, 6 = More than €5000
Income	What is your gender?	Nominal	1 = Male, 2 = Female, 3 = Other
Education	What is your highest (completed) education level?	Ordinal	1 = No education, 2 = High school, 3 = Intermediate vocational training, 4 = Higher vocational training, 5 = Scientific education (bachelor's degree), 6 = Scientific education (master's degree), 7 = Doctorate
Education (dummy)	What is your highest (completed) education level?	Nominal	0 = No or below average education (includes 1 - 3 above), 1 = Higher educated (includes 4 -7 above)

Moderating choice type context

For the most important moderating variable in this regression analysis, an original scale is used. The scale asks whether the respondent had bought a car recently, used a 'shared' car or did both. Recently, in this question refers to the last three years since it is likely that consumers remember what they did and especially with the usage of eWOM (online reviews). Table 7 shows exactly how the questions are formulated and operationalized.

Table 7: Operationalization of the moderating variable

Variable	Question(s)	Scale	Operationalization
Choice Type	Which situation applies to you?	Nominal	1 = Purchased a car, 2 = Used a 'shared' car, 3 = I did both
Choice type (dummy)	Which situation applies to you?	Nominal	0 = Purchased a car, 1 = Used a 'shared' car (excludes 3 above)

4. Data Analysis and Results

4.1 Analysis introduction

The analysis has been conducted and the findings will be presented in this chapter. First of all, the descriptive statistics of the sample and variables will be discussed. After that, the hypotheses will be tested, with the variables mentioned in the conceptual model. In order to do this, a syntax was created in SPSS (version 26).

4.2 Sample description and representativeness

4.2.1 Sample collection

For the data collection, a response of 113 respondents was achieved within one week. The survey was spread through a lot of (online) channels, several social media platforms such as LinkedIn were involved. Due to several irregulates, some responses had to be deleted. Overall, a valid response of 177 respondents was achieved after three weeks (with incentive). The respondents came from several (online) sources where they found my online questionnaire. Facebook, Survey swap, Survey circle, colleagues and (local) friends helped to achieve this response. Of course, all participants had to pass the filter question (see section 3.2.3) in order to participate in the survey. The total response number was 232, but 55 respondents had to be excluded because they fell not within the target audience. The variable ‘’choice type’’, which is referring to a recent (last 3 year – from February 2017) car purchase or usage of a ‘shared’ car, had an unequal distribution. A number of 109 (out of the 177) respondents bought a car, while 60 of the respondents used a ‘shared’ car. The 8 remaining respondents had chosen for both situations, meaning that they bought a car as well as used a ‘’shared’ car. See appendix C.4 (table number 5) for a more detailed ‘frequency’ outcome gathered from SPSS.

4.2.2 Sample distribution

Sample demographics

The sample contained 84 males and 93 females, which is relatively even distributed (resp. 47.5% and 52.5%). As for demographic representability, the sample was compared with the Dutch population that has a car at their disposal (49.7% of men, 50.3% of women) and found to be relative representative (CBS, 2019b). The distribution graph for gender is visible in the appendix (Appendix, E.1). Concerning the age distribution, the ages fell between the 18 and 74 years. In addition, this sample contains a large number of people with an age between 18 and 34, and therefore represents a somewhat skewed distribution. The biggest group (40.7%) fell with the age of 21 and 27 whereby the age of 23, 24 and 25 occurred most. According to CBS (2019a)

this sample is not representative for the Dutch population in possession of a car (share or buy), because there is relatively large group of Dutch people that is older than the age of 60. In this sample the younger people are over-represented (see the graph below: Figure 11).

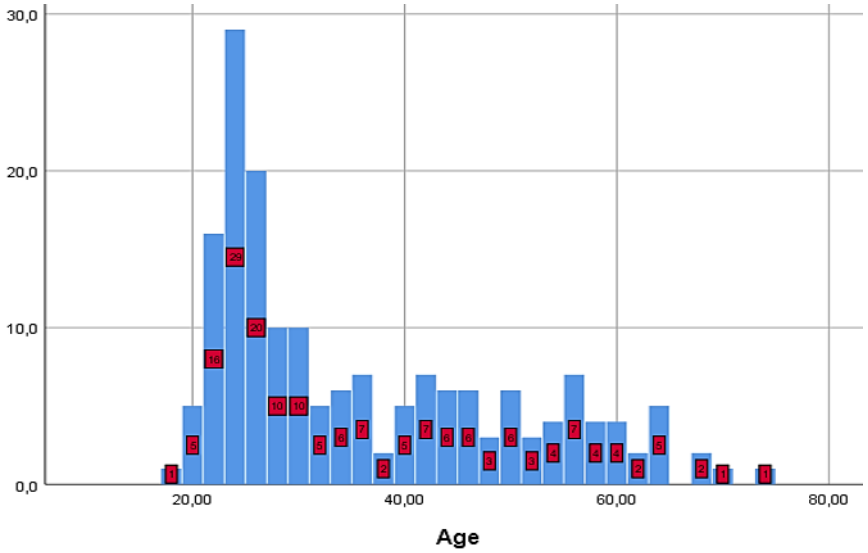


Figure 11: Distribution of age (Y-axis: count)

Regarding the incomes there was more representative distribution: 23,7% of the respondents had an income lower than €1000, 43.1% of the respondents had an income between €1000 and €3000 and 24.9% of the respondents had income above €3000 and less than €5000. Finally, the remaining 7.3% had an income higher than €5000. In terms of income distribution, this sample is relatively representative to the Dutch population in possession of a car (CBS, 2018b). The distribution of income is visible in the graph below (Figure 12).

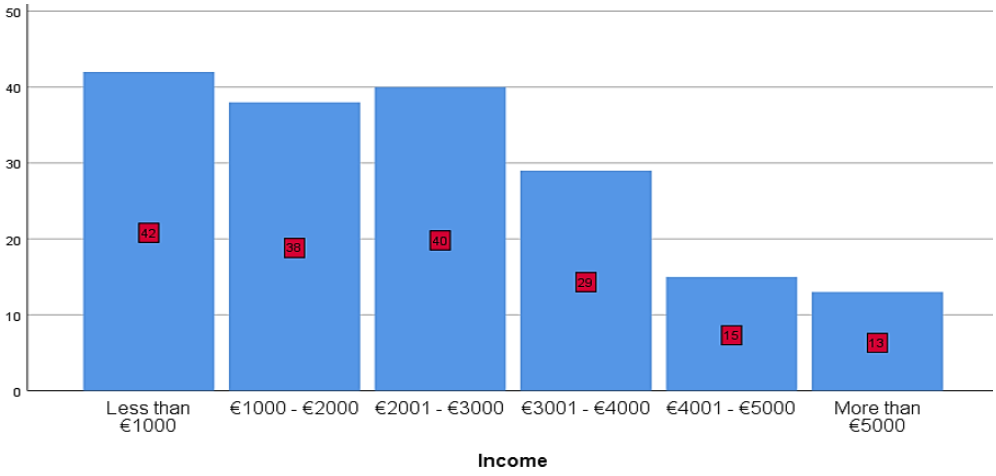


Figure 12: Distribution of income (Y-axis: count)

When considering the distribution of the educational level, this sample contained quite a lot of higher educated people. However, when comparing this characteristics with the Dutch population in possession of a car, this distribution is relatively representative (CBS, 2018a; CBS, 2020). This is visible in the graph below (Figure 13).

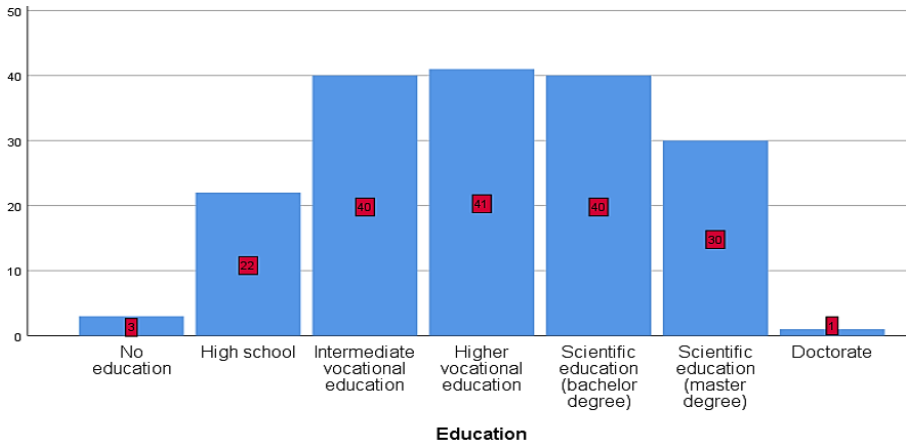


Figure 13: Distribution of income (Y-axis: count)

In general, looking at the distribution of gender, income and educational level, this sample is approximately representative for the Dutch population in possession of a car. However, considering the distribution of age, the sample is far from representative. Appendix C.1 contains a clear table with the sample distribution in numbers and percentages.

Additional sample data

Besides the earlier mentioned demographics, I gathered also additional data regarding the behavior of the respondents in combination with (purchase) decision making. Firstly, regarding to the usage of reviews towards (purchase) decision making: it is clear that our sample is over-represented with the usage of reviews. Approximately 40% of the respondents gave a score of 4 (out of 5), which is meaning that quite a lot people are using reviews before making a (purchase) decision. In addition, 81.9% of the respondents use reviews at least sometimes or even more often. This still means that, 18.1% of the respondents clearly do not use reviews before decision making. This distribution is visible in the graph below (Figure 14).

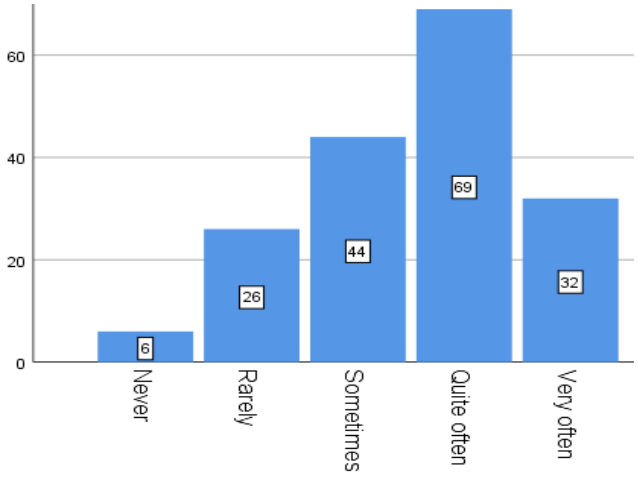


Figure 14: Distribution of review usage (Y-axis: count)

Secondly, concerning qualitative and quantitative review preferences, 58.2% of the respondents use quantitative reviews (scales, star rating e.g. 1-5). More interesting, 83.6% of the respondents prefer the usage of qualitative review (written description/videos).

Thirdly, regarding the eWOM (online) review sources, it was clear that the biggest part of the respondents (66.7%) took their reviews from independent reviewing platforms (e.g. Trustpilot). In addition, companies website reviews were used by 55.9% of the respondents. Moreover, 32.8% of the respondents used video platforms (e.g. YouTube). Personal blogs and other platforms were used by resp. 25.4% and 14.1% of the respondents. The tables in the appendix (Appendix, C.4) and especially table numbers 6, 7 and 8 till 12 show the numbers and percentages of those distributions.

The table below (Table 8) provides insights regarding the variables used for the explanation above.

Table 8: Operationalization of the 'additional' variables

Variable	**Question(s)**	**Scale**	**Operationalization**
Review usage	Please state your level of recognition with the following statement:-How often are you checking online customer reviews before you make a (purchase) decision?	Ordinal (semi-continues)	1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Quite often, 5 = Very often
Qualitative reviews	What kind of online reviews do you use as basis for your decision making (multiple answers possible)-Qualitative reviews (written description or video)	Nominal	0 = No, 1 = Yes
Quantitative reviews	What kind of online reviews do you use as basis for your decision making (multiple answers possible)-Quantitative reviews (a scale/ star rating from e.g. 1 to 5)	Nominal	0 = No, 1 = Yes
Review source 1	When looking for product reviews what platforms do you mostly choose? (multiple answers possible)-Company website	Nominal	0 = No, 1 = Yes
Review source 2	When looking for product reviews what platforms do you mostly choose? (multiple answers possible)-Independent reviewing platforms (e.g. TripAdvisor)	Nominal	0 = No, 1 = Yes
Review source 3	When looking for product reviews what platforms do you mostly choose? (multiple answers possible)-Video platforms (e.g. YouTube)	Nominal	0 = No, 1 = Yes
Review source 4	When looking for product reviews what platforms do you mostly choose? (multiple answers possible)-Personal blogs	Nominal	0 = No, 1 = Yes
Review source 5	When looking for product reviews what platforms do you mostly choose? (multiple answers possible)-Other	Nominal	0 = No, 1 = Yes

4.3 Factor Analysis and Cronbach's alpha

4.3.1 Major analysis and reliability

After gathering and processing the obtained data, a PCA (Principal Component Analysis) analysis was conducted. The goal was to determine to what extent the measured items of the (validated) scales could be reduced into the assumed major components. These major components are the dependent, independent and mediating variables. To guarantee the validity of the PCA a few assumptions were tested. According to Grande (2014) the PCA has to be controlled for high correlations in the correlation matrix (> .80) and low communalities (< .20). Likewise, the reliability of the sample has to be tested by using a Kaiser-Meyer-Olkin test (KMO = > .55) and a Bartlett's test of sphericity (p < .05) has to be conducted. All this assumptions were approximately met (see appendices, C.12 and C.13). This means that the sample is adequate and that the PCA is useful with this data.

According to Grande (2014) is the inter-item correlation matrix is used at a starting point for the analysis. A PCA was conducted based on an Oblimin rotation (correlational approach). All 16 items had three components with a Eigenvalue above the Kaiser criterium of 1 and could jointly explain more than 62% of the variance (see Figure 15 and appendix C.12).

All items were loading on three separated components (Factor 1, 2 and 3) and thus were randomly distributed over this 3 factors (see Table 9). So this means there was no distinction between the intended constructs. Thus, after digging through various PCA's I found that after deleting the first two questions (out of 4) of review volume and the first and third question (out of 4) from purchase decision, there was distinction between the dependent and independent variables (see Table 10). The distinction found was between X (Factor 2), referring towards review volume and Y (Factor 1): referring towards the attitude, valence and purchase decision. The last 3 variables are still loading on the same component (Factor 1).

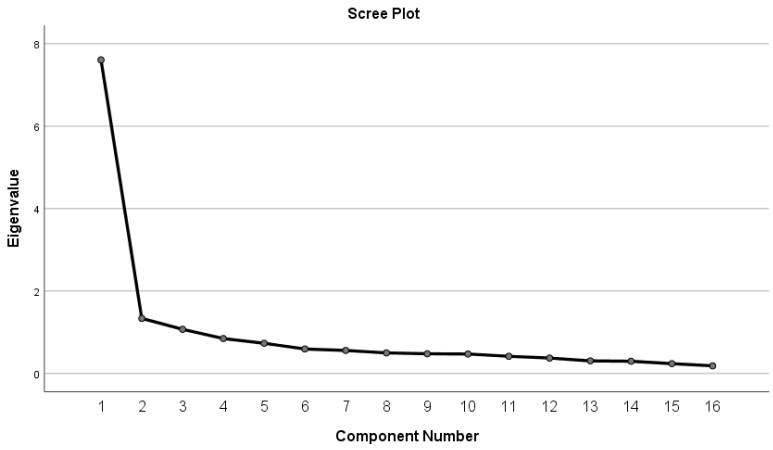


Figure 15: Scree plot belonging to three components (all 16 items)

Table 9: PCA with 16 items, extraction Oblimin

Factor	1	2	3
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I have a positive opinion about the reviews obtained online	-.005	-.072	-.776
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be beneficial for me	-.011	-.050	-.838
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Overall, my attitude towards the reviews obtained online is favorable	.018	.088	-.862
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I like (the) reviews obtained online	-.062	-.017	-.873
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be good for me	.141	.040	-.718
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The number of online reviews/comments is large, inferring that the product/service is popular	.659	.110	-.065
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Highly ranking and recommendation, inferring that the product/service has good reputations	.188	-.256	-.405
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is mentioned in front of me the more it influences my purchasing decision	-.037	-.864	-.009
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is discussed in front of me the more it influences my purchasing decision	-.198	-.877	-.165
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on reviews with very high or very low ratings for the product/service	.469	-.121	-.133
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on consistent reviews even positively or negatively	.713	-.050	-.072
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-(Overall product/service) rankings help me to quickly select the best choice among several alternatives	.378	-.389	-.113
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Previous reviews on the product/service affect my willingness to make a (purchase) decision	.285	-.559	-.104
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision	.831	.103	-.048
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I choose my product/service upon reviews which I read	.346	-.628	.036
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Information I receive online influence my purchase decision	.665	-.274	.035

Table 10: PCA with 12 items (4 excluded), extraction Oblimin

Factor	1	2
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I have a positive opinion about the reviews obtained online	.670	.175
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be beneficial for me	.703	.191
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Overall, my attitude towards the reviews obtained online is favorable	.737	.057
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I like (the) reviews obtained online	.688	.155
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be good for me	.748	.041
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is mentioned in front of me the more it influences my purchasing decision	.087	.858
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is discussed in front of me the more it influences my purchasing decision	.091	.879
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on reviews with very high or very low ratings for the product/service	.595	.038
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on consistent reviews even positively or negatively	.780	-.114
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-(Overall product/service) rankings help me to quickly select the best choice among several alternatives	.601	.181
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision	.825	-.275
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Information I receive online influence my purchase decision	.714	.007

The most important conclusion regarding to the PCA, is that there is no distinction between the concepts when all items are used. However, this has consequences for the internal (content)validity of this research. In order to create some level of distinction between the dependent and independent variables, I chose to merge the items to the pre-adopted (intended) constructs less the four original questions related to review volume and purchase decision. This choice has influence on the reliability of the constructs. The reliability (Cronbach's Alpha) scores for each of the intended constructs (with all items included) were greater than ($\alpha = .70$). The Cronbach's Alpha scores for attitude, volume, valence and purchase decision are resp. ($\alpha = .886$, $\alpha = .723$, $\alpha = .706$ and $\alpha = .805$). The score of ($\alpha = .723$) for volume could be scaled up by removing the first item (if-item deleted) to ($\alpha = .775$), but I kept the item because the score is sufficient and don't see its added value. Deleting two items for review volume created a score of ($\alpha = .846$) which is higher than with the intended constructs. For purchase decision, the score decreased to ($\alpha = .694$), but this is still sufficient.

Further conclusions, findings, strategic choices and limitations regarding the execution of the factor analysis will be described in chapter 5 (discussion).

4.3.2 Alternative PCA and robustness checks

After conducting the main PCA another approach has been executed. In line with Grande (2014), the results of the PCA with Oblimin rotation are compared with another PCA with Varimax rotation. Also in this case all the assumptions to conduct a PCA are met (Appendices, C.10 and C.11). Also in this case the items were loaded a sort of randomly over three components. Because of the lack of distinction between the dependent and independent variables the same approach is applied regarding excluding a few items. Also in this case the maximum distinction between the components could be realised by eliminating the same four items for valence and purchase decision. Finally, the two factors are considered as two different variables: factor 1 contains all the items of the constructs: attitude, valence and purchase decision, while factor 2 includes the items of review volume. By merging the items into this two different components (saving the factor scores), factor 2 is considered as the independent variable while factor 1 is considered as the dependent variable. This alternative way of expressing the items into different constructs is further analysed into robustness check 1 (exploratory factor scores).

In the conduction of the main PCA four items have been eliminated (section 4.3.1) To enlarge the validity of this research a second robustness analysis will be conducted. Also in this case the items will be merged into the pre-intended constructs, but in this without excluding any items. So, this will enable an analysis with the maximum gained data.

In section 4.8 the results of the last mentioned two robustness analyses will be presented. Finally, in section 4.9 these results will be compared with the main analysis.

4.4 Descriptive statistics

Table 11 presents the descriptive statistics of the main concepts. In detail, it shows the minimum, maximum, standard deviation (SD), median (MD) and means (M), skewness and kurtosis for each of the variables.

At first sight, there can be concluded that the means and medians are almost equal. Because of this it is likely that there is normal distribution. Later, in the next section, additional analyses have to exclude whether there is normal distribution. Each of the main items: review volume, review valence, attitude towards eWOM and purchase decision within the conceptual items had a measurement value (Likert-scale) between 1 and 5, which represents the minimum and maximum values.

Table 11: Descriptive statistics of the main items - Means (M), Standard Deviations (SD), Medians (MD), Minimum and Maximum -

Variables	*M*	MD	SD	Minimum	Maximum	Skewness	Kurtosis
Attitude	3.675	3.800	.622	1	5	-.588	1.760
Review volume	3.328	3.500	.836	1	5	-.658	-.083
Review valence	3.593	3.667	.656	1	5	-.772	1.020
Purchase decision	3.740	4.000	.833	1	5	-.614	.268

In general, each of the (independent) conceptual items had relatively high mean. For example, review valence scored positive and above average (M = 3.593, SD = .656) and for review volume (M = 3.328, SD = .836) this is also the case. For the dependent variable, purchase decision, a score of (M = 3.740, SD = .833) has been realised. In addition, respondents gave high scores on actual (purchase) decision behaviour related towards eWOM.

Table 12: Descriptive statistics of the control variables and dummies - Means (M), Standard Deviations (SD), Medians (MD), Minimum and Maximum -

Variables	*M*	MD	SD	Minimum	Maximum	Skewness	Kurtosis
Age	35.576	30.000	13.908	18	74	.779	-.593
Income	2.860	3.000	1.524	1	6	.475	-.713
Education	4.060	4.000	1.356	1	7	-.103	-.893
Gender	1.530	2.000	.501	1	2	-.103	-2.012
Dummy education	.633	1.000	.483	0	1	-.556	-1.711
Dummy choice_type	.355	.000	.480	0	1	.611	-1.646

Several other variables have been mentioned in the table 12, referring towards the control variables: age, income, education and the dummy choice type. For income it is clear that the mean is below average (M = 2.86, SD = 1.524), which is meaning that the average income is between €1000 and €3000 and for education it is clear that mean is above average (M = 4.06, SD = 1.356), which is representing that the education level

in average is at least a higher vocational training. Regarding the age of the respondents, there is an average of (M = 35.576, SD = 13.908) years. The minimum age was 18 (Min = 18), while the oldest respondent has an age of 74 (Max = 74).

Regarding to Field (2009) there are two common possibilities in which a distribution of a population may differ from a normal distribution. The first possibility is lack of symmetry, also known as skewness. Secondly, peakedness can occur, also known as kurtosis. Skewness means that data could be distributed more towards the right side (negative) or more towards the left side (positive). Field (2009) mentions that an optimal normal distribution is realised when the skewness and kurtosis values are zero (0). In real life and with real data, this value isn't possible to achieve and thus in general is assumed that a value between -1 and +1 of skewness is belonging to a normal distribution. Kurtosis shows whether the data is flattened or peaked. Field (2009) mentions that a value between -2 and +2 can assume that there is normal distribution. In general, all explanatory items have a value which lay within the interval. Thus, I can assume that the data is normal distributed.

In table 11, and referring towards the explanatory items (conceptual items), shows that the skewness values are between (–.772) for review valence and (-.658) for review volume and kurtosis values between (1.020) review valence and (-.083) for review volume. In general, based on table 11, I can assume that (on average) there is normal distribution. For the other variables (age and usage statement), I can mention, that both fall within the normal distribution boundary.

The findings cannot be tested or further analysed here, because here we limit to descriptive statistics. In the next sections the findings will be tested with the appropriate statistical method (regression analysis).

4.5 Test for assumptions

According to Field (2009) four main requirements (assumptions) are related towards execution of a regression analysis. The four most important requirements are mentioned below.

1. Normal distributed explanatory variables
2. Homoskedasticity in the error terms
3. No (serious) multicollinearity
4. The relationship between the independent variables and the dependent variable must be linear

When all conditions are met related towards the execution of a regression analysis, it can be said that the results and findings can be supported with sufficient statistical evidence. On the other side, when the assumptions are not met, the results and findings are likely based on chance. Thus, violating (several) assumptions means that the results should be interpreted with caution.

4.5.1 Normal distribution

In order to conduct a regression analysis properly, it is important to check several conditions as discussed by Field (2009). First of all, the data should meet the condition of normality of the distribution. For the explanatory variables, I have produced histograms in order to check for normal distribution.

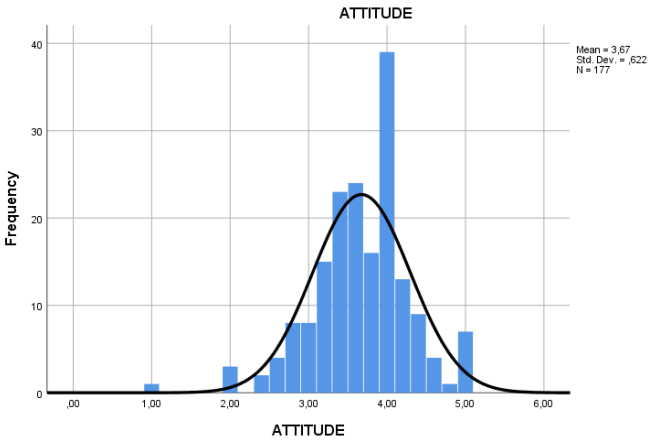


Figure 16: Histogram attitude towards eWOM

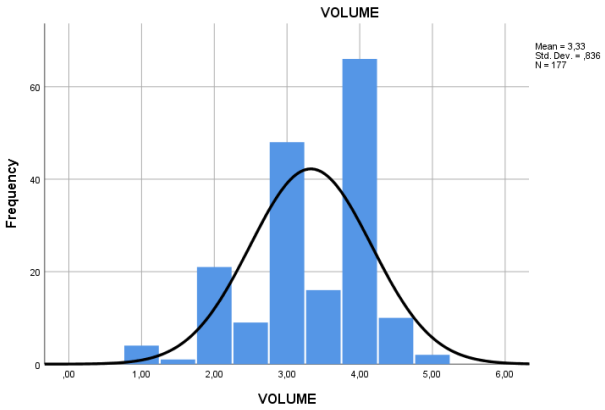


Figure 17: Histogram review volume

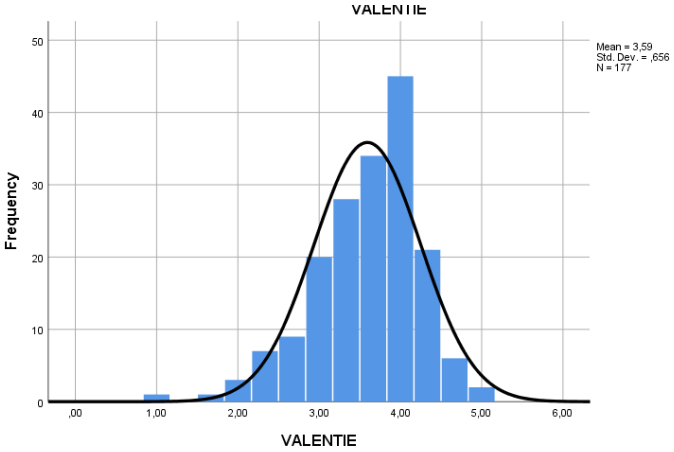


Figure 18: Histogram review valence

The first impression is there is no normal distribution for each of the variables. Attitude, volume and valence seem to be close to the normal distribution. However, it is hard to make objective conclusions about normal distribution with some histograms. Thus, to test as objective as possible, a test of normality can be done with the Kolmogorov-Smirnov or Shapiro-Wilk test. The sample size is greater than fifty (N > 50), which means

that the Kolmogorov-Smirnov test is appropriate (Field, 2009). The hypothesis which tests for normality is shown below, when ($p < .05$) there can be assumed that there is normal distribution for each of the variables.

H0: The explanatory variables are normally distributed
H(alternative): The explanatory variables are NOT normally distributed

Based on the output in the appendix (appendix, C.5), each of the explanatory variables have a sig. level which is lower than the rejection of level of 5% ($p < .05$). The significance levels represent that we can reject the null hypothesis for each of the explanatory variables (attitude, volume and valence). Thus, the explanatory variables differ from the normal distribution. In conclusion, this means that there is a risk of that the outcomes are different than when the population is normally distributed. So, results should be interpreted with caution. Last but not least, the normal Q-Q plots below will help to clarify earlier conclusions about normality.

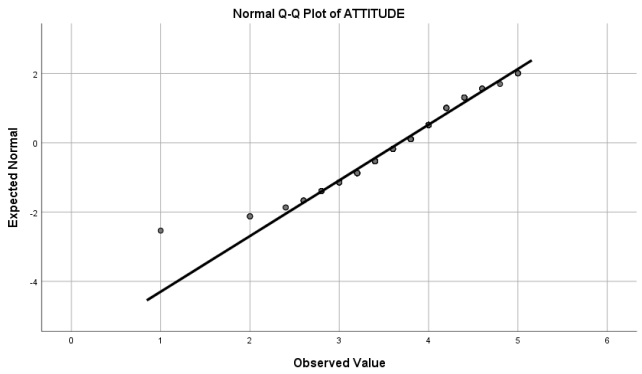


Figure 19: Q-Q plot attitude towards eWOM

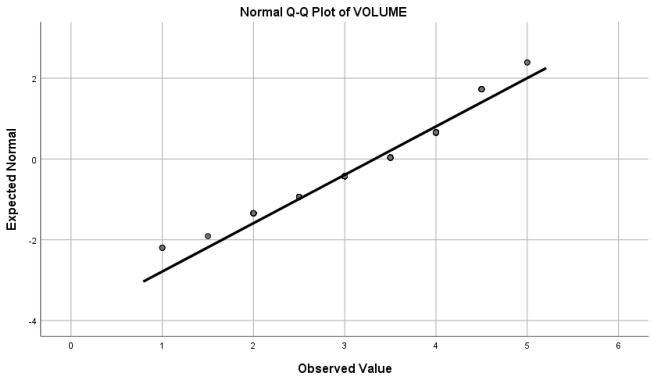


Figure 20: Q-Q plot review volume

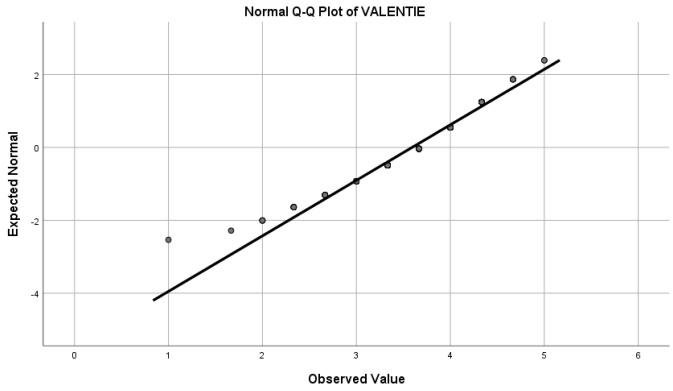


Figure 21: Q-Q plot review valence

As seen above (Figure 18-21), there are no big outliers from the normal distribution line. Thus, there is some skewness, but without major violence of the assumptions. Of all the mentioned figures above (Figure 18–21), attitude towards eWOM looks like the most accurate towards normal distribution (validated scale). When

looking back at all earlier analysis, there can concluded that (approximately) there is no normal distribution however, there are some slight deviations from normality.

4.5.2 Multicollinearity

Another assumption towards conducting a regression analysis is to test whether there is multicollinearity. Multicollinearity means that several explanatory variables correlate to much with each other. According to Field (2009) a value ($r > .80$) or ($r < -.80$) means that we have multicollinearity and thus the concepts measure too much the same. In order to test whether there is multicollinearity a Pearson correlation matrix has been conducted. As seen in table 13, all explanatory variables have a (relative) high positive and significant correlation. There were no values that fell outside the boundaries mentioned above, which means that there is no multicollinearity within the explanatory variables. Regarding to the output in the appendix (appendix, C.6), none of the demographic variables (whereby education is used as dummy) had a high positive or negative correlation as well ($-.80 \leq r \leq .80$) So overall, the assumption is met.

Table 13: Pearson correlation matrix for the conceptual items (attitude, volume, valence and purchase decision)

Variables	1	2	3	4
1. Attitude	1.00	**.501****	**.648****	**.507****
2. Review volume	**.501****	1.00	**.462****	**.245****
3. Review valence	**.648****	**.462****	1.00	**.550****
4. Purchase decision	**.507****	**.245****	**.550****	1.00

*Note. N = 177. * p < .05 ** p < .01 *** p < .001 (two-tailed)*

Field (2009) mentions that multicollinearity can be tested through the VIF (variance inflation factor) test. The VIF indicates whether there is high correlation with other variables (multicollinearity). According to Myers (1990) a VIF value greater than one and smaller than ten indicates no signals for multicollinearity. The regression outputs in the appendix (Appendices, C.8 and C.9) made clear that there is no reason for violation. However, before the means centering method was applied, the VIF scores were extremely high (Appendix E.2). As expected for a dichotomous variable, the moderating variable (choice type) had an extremely high VIF value of 45.465. Because of this, both interactions, which combined choice type with review volume and review valence achieved high VIF scores of resp. 37.661 and 72.482. However, after that the means were centered, the scores were within the acceptable borders (Myers, 1990). The dichotomous variable had a score of 1.286 and the interactions with volume and valence achieved scores of resp. 1.243

and 1.306. In general, there was no multicollinearity and thus approximately the assumption was not violated.

4.5.3 Linearity and homoskedasticity

Another requirement for the regression analysis is to check for linearity, meaning that the relationship between the independent variables and the dependent variable must be linear. In addition, to assess whether there is linearity of the explanatory and explanatory variables, two figures have been added below (Figure 22 and 23).

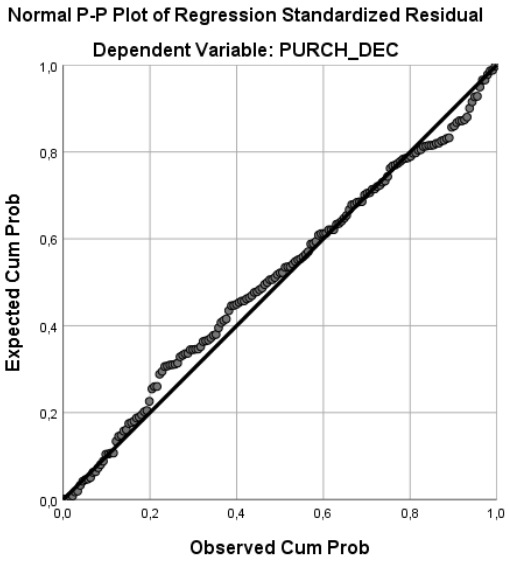


Figure 22: P-P plot of purchase decision

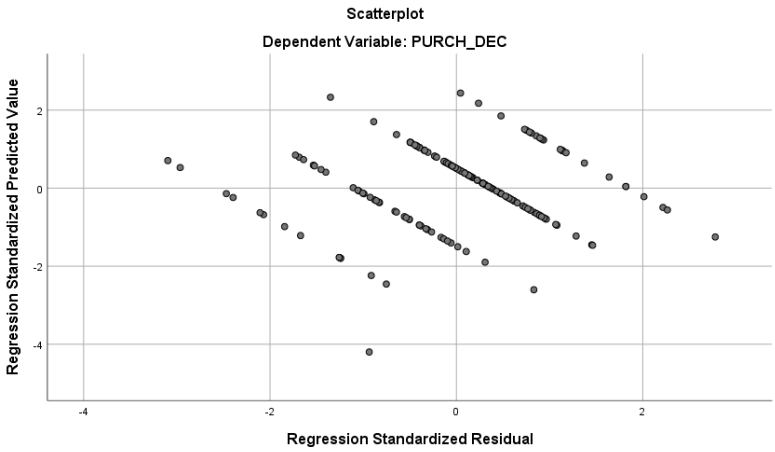


Figure 23: Scatterplot of purchase decision

Based on figure 22 and 23, there can assumed, that there is a linear relationship between the independent and dependent variables. The points in the graph are relatively close to the linear line. Despite, some outliers, there is no extremity in violation due minimal deviation of the points. According to Field (2009) homoskedasticity is meaning that residuals have the same variance at each level of the predictors. When this is not the case, the opposite happens, referring to heteroskedasticity and thus the assumption is not met. Figure 22 explains linearity, but nevertheless the are quite some deviations on the bottom left as well the top right. Figure 23, shows a scatterplot with the residuals. Visible here, is that the points and lines are oblique distributed and thus that the assumption of homoskedasticity is approximately not met.

4.5.4 Overview of assumptions

Overall, table 14 shows whether the assumptions are met or not. Currently, there seems to be no normal distribution (i.e. bell-shaped graphs). Despite there (approximately) is no normal distribution, there are no gross deviations (see also other assumptions). Even with that not all requirements are met, the analysis still had to be performed in line with this thesis. Afterwards, the results should be interpreted with caution.

Table 14: Overview of assumptions that are violated or not

Assumptions regression analysis	Met or not met
1. Normal distribution	Approximately not met (chapter 4.5.1)
2. No multicollinearity	Approximately met (chapter 4.5.2)
3. Homoskedasticity in residuals	Approximately not met (chapter 4.5.3)
4. Linear relationship between outcome and independent variables	Approximately met (chapter 4.5.3)

4.6 Hypotheses testing

In section 2.4 (hypothesis formulation) several hypotheses had been formulated. Two hypotheses (1a and 1b) were formulated in order to test the main effects of review valence and volume on (purchase) decisions. After that, two hypotheses (2a and 2b) were formulated in order to test for interaction effects between choice type (car purchase or shared car usage) and the independent variables (valence and volume) on the dependent variable (purchase) decision. Last but not least, two hypotheses (3a and 3b) were formulated in order to test for mediating effect of attitude towards eWOM. In other words, in which extent is attitude towards eWOM explaining the relationship between review valence and volume (X) and (purchase) decision (Y).

4.6.1 Description important regression elements

Determination coefficient (R^2)

I would like to mention that I created two different regression outputs with SPSS. First of all, it is important to look at the determination coefficient (R^2). According to Field (2009) a R^2 value higher than .13 and lower than .26, can be experienced as average. A frequently mentioned drawback of the R square is that if another (extra) variable will be added in the model, the score always will increase even if it is useless and it cost degrees of freedom. Because of this, it is better to look at the adjusted R square as Field (2009) mentions. In addition, the R square refers to in what extent the variance in the outcome would be explained if the model was derived from the population from which the sample was taken. Thus, the value of the adjusted R square doesn't indicate any strength if the sample would be different.

Significance level and direction

In order to test for significance levels, I look at the p-value mentioned in the regression outputs. The p-value indicates the probability of exceeding the called test statistic. In other words, in what extent the model is coincidental. The researcher has to compare the significance with the chosen unreliability to conclude whether the null hypothesis can be supported or rejected. In practise, a value of $\alpha = .05$ (5% unreliability) is acceptable, meaning that $1-\alpha = .95$ (95%). It is common to test one-tailed when a directional coefficient is positive as well as when the hypotheses are positive formulated. In this situation, an $\alpha = .10$ could be applied. However, this means that a higher level of unreliability is used and thus that the results should be interpreted with caution. Furthermore, it is important to look at the standardized (β) value, because the unstandardized

values (B) are less useful for comparison purposes (when the measurement scales of the independent variables are non-identical).

4.6.2 Results and findings

Regression analysis variance and significance model

Both, regression output 1 and 2, used the demographic variables in model 1. Thus, as expected a low value for the adjusted R Square (R^2). The model with the dummies included, explained 6.3% of the variance and thereby is the model significant ($F = 3.805$, $p < .05$). In general, age here, has a negative significant influence on purchase decision. In addition, this means mainly if people get older they score lower on decision making in this empirical context. Age has a negative standardized beta score ($\beta = -.206$, $p < .05$). The control variables here have no further value for the hypotheses testing, except for controlling groups. Firstly, when looking at model 2 of regression output 1 (Table 15), I see that the model is significant ($F = 11.648$, $p < .05$). In addition, a relatively high adjusted R Square (r^2) has been found, 30.7% of the variance is explained in this model. Model 3 is significant ($F = 11.778$, $p < .05$) and an adjusted R Square (r^2) of 33.9% has been found. The only difference and addition with model 2, is that the mediating variable attitude towards eWOM has been added. Secondly, looking at model 2 of regression output 2 (Table 16), I see that the model is significant ($F = 10.073$ $p < .05$). In addition, a relatively high adjusted R Square (r^2) has been found, 35.1% of the variance is explained in this model. Model 2 included the main effects as well as the interaction effects. Attitude has also been added to see what mediating variable does in this empirical context. The outputs include the unstandardized beta values (B), standard errors (SE), standardized beta values (β) and the significance levels (p).

Table 15: Regression output 1 - hierarchical regression analysis with purchase decision as dependent variable (including unstandardized beta values (B), standard errors (SE), standardized beta values (β) and the significance levels (p) –

	Model 1				*Model 2*				*Model 3*			
Estimates	*B*	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*
Gender	.124	.126	.074	.326	.090	.109	.054	.406	.041	.107	.025	.701
Age	-.012	.005	**-.206***	.021	-.003	.005	-.042	.597	-.001	.005	-.015	.846
Income	.062	.049	-.112	.205	-.048	.043	-.087	.264	-.047	.042	-.084	.268
Dum. education	.055	.133	.032	.677	.020	.115	.012	.861	.011	.112	.006	.923
Volume					-.056	.075	-.057	.452	-.115	.075	-.116	.131
Valence					.657	.095	**.527****	.000	.493	.108	**.396****	.000
Dum. choice_type					.146	.123	.084	.237	.112	.121	.065	.355
Attitude									.353	.119	**.266****	.004
R^2	.085				.336				.371			
Adjusted R^2	.063				.307				.339			
F-value	3.805***				11.648***				11.778***			

Note. N = 177. * *p* < .05 ** *p* < .01 *** *p* < .001 *(two-tailed)*

Table 16: Regression output 2 - hierarchical regression analysis with purchase decision as dependent variable (including unstandardized beta values (B), standard errors (SE), standardized beta values (β) and the significance levels (p) –

	Model 1				*Model 2*			
Estimates	*B*	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*
Gender	.124	.126	.074	.326	.004	.108	.002	.970
Age	-.012	.005	**-.206***	.021	.001	.005	.011	.894
Income	.062	.049	-.112	.205	-.051	.042	-.092	.222
Dum. education	.055	.133	.032	.677	.027	.113	.016	.810
Valence					.475	.109	**.381*****	.000
Dum. choice_type					.162	.122	.093	.188
Volume					-.130	.075	-.132	.085
Attitude					.384	.119	**.290****	.002
Choice_type x valence					-.435	.198	**-.156***	.030
Choice_type x volume					.099	.147	.047	.503
R^2	.085				.389			
Adjusted R^2	.063				.351			
F-value	3.805**				10.073***			

*Note. N = 177. * p < .05 ** p < .01 *** p < .001 (two-tailed)*

Hypotheses 1a and 1b (main effects)

Regression output 1 (Table 15) shows that one main effect is significant. Firstly, review valence has a positive and significant standardized beta value (β = .527, p < .05). On the other hand, review volume has a negative and not significant standardized beta value (β = -.057, p < .05). So both variables have an opposite effect on (purchase) decisions in this empirical context, but for valence this effect is significant. In general, I found no statistical evidence to reject H0 for hypothesis 1a (review valence on purchase decision). For the other hypothesis 1b (review volume on purchase decision), I could not find any support. Testing both hypotheses one-sided is appropriate, meaning that a α = .10. Despite this, the p-value is even lower than α = .05 (5%), meaning that a higher level of statistic certainty for hypothesis 1a.

H1(a) is supported and H1(b) is not supported.

Hypotheses 2a and 2b (interaction effects)

Regression output 2 (Table 16) makes clear that one interaction effect is significant. Firstly, the interaction with choice and valence (choice x valence) shows that the standardized beta value is negative and significant (β = -.156 p > .05). Secondly, the interaction between choice and volume (choice x volume) shows a positive

standardized beta value that is not significant (β = .047, p > .05). In general, a higher score on review valence in combination with the car 'sharing' choice means a greater negative impact on decision making in comparison with car buyers. For the other interaction the opposite happens, meaning that a higher score on review volume in combination with a car 'sharing' choice has a greater positive impact on decision making in comparison with car buyers. Hypothesis 2a (interaction with valence) could be supported with sufficient statistical evidence. Hypothesis 2b (interaction with volume) could not be support and thus will be rejected. In conclusion, car buyers differ from 'shared' car users in eWOM valence. For eWOM volume there is no statistical difference between the groups.

H2(a) supported and H2(b) not supported.

Hypotheses 3a and 3b (mediating effects)

According to Baron and Kenny (1986) there are several steps to test if there is a mediating effect. Regression output 1 (Table 15) makes clear that there is no mediation. Necessary is to explain this, model 2 in this output included the main effects of review volume and valence on purchase decision. Before adding attitude towards eWOM in the output, review volume had a negative standardized beta value that was not significant (β = -.057, p > .05). On the other side, review valence had a positive standardized beta value that was significant (β = .527, p < .05) before adding attitude towards eWOM (Model 2). When attitude towards eWOM (mediator) was included in model 3, the main effects had almost the same influence and statistical support (or not). For example, the standardized beta values changed from (β = -.057, p > .05) to (β = -.116, p > .05) for review volume and from (β = .527, p < .05) to (β = .396, p < .05) for review valence. Thus, this indicates that after the mediating variable (attitude towards eWOM) was added, very small changes occurred and there is no mediation. The reason for using Baron and Kenny (1986) instead the method from Hayes (2019) is that it is overlapping with the previous tables and thus the standardized beta values could be used.

H3(a) not supported and H3(b) not supported.

4.7 (G)-power analysis

To confirm and validate further for validity concerns, there was a power analysis examined with the (G)-power tool. In absolute terms, the sample size was sufficient to draw reliable conclusions. The established confidence level retrospectively based on the power analysis, found the be higher than 95% (power of .957) Thus, according to Stephanie (2015) this study has 95.7% chance of the test having significant results. In addition, a high power means that the test results are likely valid and the probability of making type II error(s) decreases. From here a conclusion can be drawn that probably it is not the case that any findings are missed due a low sample size and/or too many measured variables (Lenth, 2007). The calculation is based on an effect size f square of .150 (which is medium), a sample size of 177, an α value of .05 and 10 predictors.

4.8 Robustness check

This chapter contains two different robustness checks in order to substantiate findings and results with (important) different approaches.

4.8.1 Robustness check 1

As mentioned in chapter 4.3 (Factor analysis and Cronbach's Alpha), I should create a robustness test that is based on the exploratory factor scores. As mentioned before, none of the hypotheses could be tested with three factors (all items included) because of distinction issues. Thus here after removing the two items for review volume as well as two items for purchase decision, I was able to test the first hypothesis (1b and 2b). Moreover, these hypotheses are about the main effect of review volume and the interaction effect of volume and choice type. The table (Table 17) is shown below and includes the regression output. First of all, it is important to mention that the adjusted (r^2) was 18.2%, which is relatively low and which tells that 18.2% of the variance in explained in the model (Model 2). In addition, the model is significant (($F = 6.336$, $p < .05$). The hypotheses regarding mediation could not even be tested. One advantage compared to the original executed analysis based on means less the four variables, is that the assumption for homoskedasticity has been met and thus three out of four assumptions were met. The output in the appendix (appendix, C.14) includes all data for this table (Table 17).

Table 17: Regression output based on factor scores with attitude, valence and purchase decision (loaded Factor 1_1) as dependent variable (including unstandardized beta values (B), standard errors (SE), standardized beta values (β) and the significance levels (p)

	Model 1				*Model 2*			
Estimates	*B*	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*
Gender	.262	.322	.129	.073	.259	.143	.128	.073
Age	-.025	.145	**-.347*** **	.000	-.021	.006	**-.299****	.001
Income	-.065	.006	-.097	.246	-.041	.056	-.061	.470
Dum. education	.066	.153	.032	.666	.041	.153	.019	.791
Factor 2_1					.032	.090	.032	.721
Dum. choice_type					.425	.161	**.202****	.009
Factor 2_1 x choice_type					-.058	.148	-.035	.698
R^2		.180				.216		
Adjusted R^2		.160				.182		
F-value		8.987***				6.336***		

*Note. N = 177. * p < .05 ** p < .01 *** p < .001 (two-tailed)*

The output makes visible that the main effect of volume (Factor 2_1) is positive, but not significant ($\beta = .032$, $p > .05$). For the interaction it is clear that the value is not significant as well ($\beta = -.035$, $p > .05$) and thus, all hypotheses here won't be supported. A small addition here regarding the control variables, the

standardized beta value for age is negative and significant (β = -.299, p < .05). Thus, the older people get, the greater the negative effect on decision making is.

4.8.2 Robustness check 2

In addition on the earlier methods and findings, the outputs below show the regression analysis which is based on the (pre-adopted) intended constructs with all items included.

Table 18: Regression output based on intended constructs and all items included with purchase decision as dependent variable (including unstandardized beta values (B), standard errors (SE), standardized beta values (β) and the significance levels (p)

	Model 1				*Model 2*				*Model 3*			
Estimates	*B*	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*
Gender	.113	.098	.082	.250	.044	.064	.032	.500	.017	.064	.012	.790
Age	-.015	.004	**-.306*** **	.000	-.001	.003	-.013	.823	.000	.003	-.005	.930
Income	-.073	.038	-.158	.059	-.036	.025	-.080	.153	-.036	.025	-.079	.148
Dum education	.114	.104	.080	.272	.141	.069	**.099***	.041	.129	.068	.091	.058
Volume					.409	.067	**.386*** **	.000	.336	.071	**.317*** **	.000
Valence					.441	.062	**.428*** **	.000	.371	.067	**.360*** **	.000
Dummy choice					.140	.073	.098	.057	.124	.072	.087	.086
Attitude									.194	.075	**.178***	.010
R^2			.183				.658				.671	
Adjusted R^2			.163				.643				.655	
F-value			9.181***				44.161***				40.875***	

*Note. N = 177. * p < .05 ** p < .01 *** p < .001 (two-tailed)*

Table 19: Regression output based on intended constructs and all items included with purchase decision as dependent variable (including unstandardized beta values (B), standard errors (SE), standardized beta values (β) and the significance levels (p)

	Model 1				*Model 2*			
Estimates	*B*	*SE*	*β*	*p*	*B*	*SE*	*β*	*p*
Gender	.113	.098	.082	.250	.006	.065	.004	.930
Age	-.015	.004	**-.306*** **	.000	.000	.003	-.004	.945
Income	-.073	.038	-.158	.059	-.036	.025	-.078	.156
Dum. education	.114	.104	.080	.272	.122	.069	.086	.078
Valence					.378	.067	**.367*** **	.000
Dum. choice_type					.130	.075	.091	.083
Volume					.320	.072	**.301*** **	.000
Attitude					.207	.076	**.190** **	.007
Choice_type x valence					-.157	.129	-.069	.226
Choice_type x volume					.163	.129	.070	.206
R^2			.183				.676	
Adjusted R^2			.163				.655	
F-value			9.181***				32.914***	

*Note. N = 177. * p < .05 ** p < .01 *** p < .001 (two-tailed)*

The outputs (excluded model 1) are significant (F = 44.161, F = 40.875 (Table 18) and F = 32.914 (Table 19), $p < .05$) and the explained variances lay between 64.3% and 65.5%, which is relatively high. All effects found to be significant, except both interaction effects. For example, the main effects for volume and valence are significant with resp. ($\beta = .386$, $p < .05$ and $\beta = .428$, $p < .05$). The main effects stayed positive and significant after that the mediating variable (attitude towards eWOM) has been added. Attitude towards eWOM has a positive and significant effect, but this concept is close to the dependent variable (see factor analysis). Both interactions with volume and valence were not significant with resp. ($\beta = .070$, $p > .05$ and $\beta = -.069$ $p > .05$). So, none of the hypotheses, except the main effects could be supported. Last but not least, none of the control variables were significant in this model.

4.9 Results summary

Table 20 provides an overview of the outcomes regarding the hypotheses testing. The main analysis is covered in section 4.4 till 4.7. Both robustness checks are treated in section 4.8 in order to compare the findings and substantiate strategic choices. In addition, robustness check 1 is based on the exploratory factor scores with the two questions for volume and two questions for purchase decision deleted. Moreover, robustness check 2 is based on the (pre-intended) constructs and thus with all items included. It is clear that the outcomes differ and the main analysis provided support for two hypotheses (main effect valence and interaction with valence).

Table 20: Hypotheses conclusions

Hypothesis	Description hypothesis	**Main Analysis** (includes all items less four questions)	**Robustness Check 1** (includes the items based on the exploratory factor scores with four items deleted for distinction between volume and the other concepts)	**Robustness Check 2** (includes all items of the (pre-adopted) intended constructs, thus all items included)
H1 (a)	The quality (valence) of online reviews positively affects consumers' purchase decisions	Supported	Could not be executed	Supported
H1 (b)	The quantity (volume) of online reviews positively affects consumers' purchase decisions	Supported	Not Supported	Supported
H2 (a)	Choice moderates the relationship between online review quality (valence) and purchase decisions	Not Supported	Could not be executed	Not Supported
H2 (b)	Choice moderates the relationship between online review quantity (volume) and purchase decisions	Not Supported	Not Supported	Not Supported
H3 (a)	Attitude towards eWOM explains the relationship between review valence and (purchase) decision	Not Supported	Could not be executed	Not Supported
H3 (b)	Attitude towards eWOM explains the relationship between review volume and (purchase) decision	Not Supported	Could not be executed	Not Supported

5. Conclusion

In this conclusion section, I will report and substantiate the meaning of the results that have been found. The most important findings, conclusions, strategic choices, limitations will be treated in detail. Last but not least, advices regarding further/future research will be given.

5.1 Summary of findings

The study aimed to investigate the following research question: **‘’What is the effect of CGR on the purchase decisions and what is the role of product or service choices within this effect?’’ and in empirical context: ‘’What is the effect of CGR on automotive/transportation (purchase) decisions and what is the role of car sharing or car purchasing choices within this effect?**’’.

This research question was supported by several sub-research questions, which sent to what the effect of eWOM is on decision making, how eWOM affects decision making, the moderating role of products (car buyers) and services (car sharers) and the mediating role of attitude. The following section will explain in detail what the findings are and answer the questions as fully as possible.

The study started with comprehensive literature research in field of eWOM and the CDJ. The literature helped to make some assumptions related towards the (potential) findings in this empirical context. Firstly, based on the literature, it was assumed that volume and valence would have a positive effect on the purchase decision. This study is in line with the previously found research results regarding the positive effect of review valence on (purchase) decision making. Although a similar (positive) effect on purchasing decisions was also expected for volume, no evidence could be found in this study. Secondly, based on the literature of products and services in combination with eWOM, there was assumed that the effect of eWOM would be greater for products than services. This study confirmed the finding expected from there literature when it relates to the effect of review valence. Also here, a similar moderating effect was expected for review volume, but there was no evidence for this. Thirdly, the literate regarding the role of attitude (towards eWOM) it was assumed that there should be a mediating effect of attitude towards eWOM on (purchase) decision making. However, this research could not find any evidence for a mediating effect of attitude towards eWOM for both combinations with review volume and review valence on (purchase) decision making (Baron & Kenny, 1986).

The results and findings were also checked on a number of demographic variables (age, gender, income and education). The control variables made clear that the demographic factor for age found statistical support, which means that the older the person is the less their purchase decision is influenced in relation to eWOM. For the other demographic variables (gender, income and education), no statistical evidence has been found and thus those groups do not differ in effect.

5.2 Discussion

5.2.1 Managerial relevance

This research provides insights regarding the effects of eWOM on (purchase) decision making in the automotive/transportation field. As mentioned in the managerial relevance (chapter 1), the findings could be important for (marketing) managers for both (local) dealerships as well as car sharing initiatives. First of all, it is clear that the eWOM elements influence decision making in the automotive/transportation field. This research identified that user-generated reviews and especially valence (quality) play an important role in (purchase) decision making in the transportation/automotive field. The most important contribution found in this study is that the quality of reviews (valence) has impact on decision making, meaning that it necessary to collect reviews with high quality. In addition, as other studies found that the quantity of reviews is (more) important, this empirical context cannot confirm that. This also has to do with the fact that in hotel and restaurant contexts the choice is more accessible in comparison with a car purchase (specialty good).

Because of this, I recommend, the dealerships and car sharing initiatives to use reviews as feedback to improve activities. As earlier studies in the field of eWOM already found, reviews could help companies to improve products and services, measure customer satisfaction, creating the best customer experiences, boost sales and even more. This study confirms the importance of eWOM valence (quality) and the influence of eWOM in general. If the dealerships and car sharing initiatives increase activities related towards eWOM (collect reviews, responding on reviews, show transparency in communication, go into dialog with customers/users and solve problems via reviews), the company benefits of the return of the customers. For example, it is likely that if the consumers/users will be satisfied through these activities, they will share positive eWOM (e.g. reviews). In addition, the attitude of prospective buyers/sharers towards the products and/or services will be influenced positively.

Furthermore, marketing managers in the automotive/transportation field should implement user-reviews on the companies' website to increase attention, engagement and attractiveness towards the product and/or services. For example, the importance for product reviews has been proven for amazon (Vega, 2017), reviews boost online sales. Because of this, it is clear that (local) dealerships and car sharing initiatives should implement customer reviews on their own websites and focus on the quality instead of quantity.

5.2.2 Academic relevance

The research performed in this study contributes to the existing literate regarding eWOM, UGC and the decision-making model (CDJ), which are related to the field of marketing. As earlier mentioned in the academic relevance (chapter 1), there was still no empirical research, which focussed on the impact of eWOM valence and volume on (purchase) decision making and the role of products (car buyers) or services (car sharers) within this effect (moderating role). Furthermore, this study aimed to investigate the mediating role of attitude towards eWOM. In support of other studies in this field (theoretical framework), this study

confirmed the positive impact of eWOM valence (quality) on (purchase) decision making. Furthermore, this research found difference in eWOM effects between products (car buyers) and services (car sharers) when it relates to review valence. Thus, in this empirical context there is significant difference between the groups on review valence. For more expensive, higher risk and less accessible products (i.e. car purchase), the quality of reviews is very important rather than services (i.e. using a 'shared' car).

Regarding the mediating role of attitude towards eWOM, which this study examined, it is clear that there is no mediation (impact is too small). Important to add, the total direct effect decreased after that the mediating variable (attitude towards eWOM) was added. In conclusion, this means that there is almost no support on mediating effects in this empirical context. Last but not least, this study controlled for gender, education, age and income and found in general no big differences, except that people with a higher age have a negative influence on (purchase) decision making and thus differ from the opposite (younger) group.

5.2.3 Validity and limitations

This section offers a lot of clarity regarding the limitations encountered in this study, followed by recommendations for further/future research. As this study contains several limitations I would like to clarify the validly and reliability limitations and I want to elaborate on my strategic choices within this. When looking the validity of a quantitative research, afterwards there is evaluated about the value of the conclusions found/made. There is distinction between internal and external validity.

Internal validity

The internal validity (legality) is the degree to which the research design accurately reflects the causal relationship between the variables and it is not a reflection of an error in the research design (Nishishiba, Jones & Kramer, 2014). First of all the internal validity is guaranteed by using reasonable validated scales. In addition, a pre-test has been executed under the research population for further fine-tuning and validation of the scales. The questions needed small changes in order to fit for this empirical context. Furthermore, several reliability tests have been executed (Cronbach's Alpha and Principal Component Analysis). For further validation this study checked for statistical assumptions and executed robustness checks. The Cronbach's Alpha test makes clear that the items are sufficient reliable, while the PCA test makes clear that there was almost no distinction between the concepts (three components with random distributions for the items). Therefore, in addition to the internal validity, some limitations will follow.

Regarding the internal validity, several things need to be mentioned. First it is important to mention the four intended constructs (attitude, valence, volume and purchase decision) loaded on three different components and therefore created overlap with each other (see factor analysis), meaning that there is not enough distinction between the concepts. Distinction issues were found between attitude towards eWOM, review valence and purchase decision, because loadings were on the same factor (dependent and independent variables). This distinction issues were ignored by using the pre-intended constructs to make all hypotheses testable. Therefore it is important to mention that the results should be interpreted with caution due to

(content)validity limitations. Secondly, the robustness check(s) confirmed the findings of the main analysis: by using different approaches to operationalizable the constructs mostly the same findings were realised. These different robustness checks substantiated the earlier found results.

Last but not least, the study focused on the attitude towards review volume and review valence in a general sense instead of the actual volume and valence used in (purchase) decisions. This could have contributed to the limited distinctiveness of the concepts.

External Validity

The external validity (generalizability) indicates to what extent the study results are valid to draw a conclusion for the whole research population (Nishishiba et al., 2014). In this research, the population is defined as people who bought a car or used a 'shared' car in the past three years. According to Field (2009), this research meets the condition of the number of predictive concepts in combination with the research sample size and thus sufficient reliable statements can be made with the data which has been found. Afterwards, a G-power analysis confirmed that there were no false negatives (findings) in the study. Thus, assumed it is not the case that any findings are missed due a low sample size and/or too many measured variables (so there was no systematic bias). Most of the empirical sub-questions have been answered based on the failure to find the substantive coherence between concepts assumed in the literature. In the extension od the external validity some limitations will follow.

First of all, a limitation related towards the external validity is that the study has a cross-sectional character (in contrast with a longitudinal study). Therefore, the independent variables could not be pre-measured and thus no statements can be made about causality. In addition, this is because the assumption of sequence of time (Field, 2009) is not met. However, based on the empirical results in comparison with the theoretical literature, it is likely that I can say with caution that causality is presumed. Secondly, the results are based on self-assessments of the respondents instead of objective assessments. Hereby it is likely that there is risk of socially desirable answers, which influences the findings negatively. Finally, there is a limitation regarding to the representativeness of the sample population. After comparing it can be concluded that the sample size deviates from the assumed population where the findings should be generalized to. For example, the population in the sample was relatively young.

Although the validity and reliability are generally guaranteed, the execution of the quantitative research subject to some restrictions, which should be considered when interpreting the results (the interpretation of the content validity).

5.3 Recommendations and future research

This research is not excluded from limitations (section 5.2.3) and thus recommendations will be given for direction in further research.

Firstly, recommend is to do a longitudinal study so that the developments and changes in the field of eWOM and its influence on purchase decisions in the automotive/transportation can be managed easily. In addition, it is a flexible research type and it can ensure clear focus and even increases validity. Last but not least, a longitudinal research type is very effective on doing research on developmental trends and thus is in line with the increasing awareness and interest in car sharing (Miller, 2016). Secondly, as it is clear in the limitations section, necessary is to develop more validated concepts regarding review volume, review valence and purchase decision. This will create the research a more validated one (better distinction and interpretation of the results).

Thirdly, going more into detail regarding this (automotive/transportation) empirical field, it would be great to examine such studies with different populations/audiences (e.g. other countries than used in this thesis). In addition, this research is limited to the Dutch automotive user and thus other countries/audiences can be used in the future. For further support, this research is limited to a sample size of (N = 177). Despite this sample size had no major consequences on the outcomes (e.g. power analysis) recommend is to achieve a larger sample size for further validity of the results and outcomes.

Fourthly, this research is limited to a correlational approach. Thus, recommend to do an experimental setting in any way which is appropriate. In addition, an experimental design makes it possible to compare groups with each other. Finally, this study focussed on the buying stage of this model and thus which behaviour people shown in the past regarding decision making. In addition, the CDJ contains more phases and thus interesting could be to focus on the evaluation stage (information gathering and purchase intention) whereby future behaviour regarding choices will be investigated.

References

Lizawati A. H. Aman. (2011). The influence of environmental knowledge and concern on green purchase intention. The role of attitude as mediating variable. [Masters, Universiti Malaysia Sabah]. http://eprints.ums.edu.my/9267/

Abdelaziz, M., Aziz, W., Khalifa, G., & Mayouf, M. (2015). Determinants of Electronic word of mouth (EWOM) influence on hotel customers' purchasing decision. 9, 194–223.

Ahmad Zamil, A. (2011). The Impact of Word of Mouth (WOM) On the Purchasing Decision of the Jordanian Consumer. Research Journal of Internatıonal Studıes, 24–29.

Akram, U. (2020). (2) (PDF) The Role of Motivational Factors for Determining Attitude Towards eWOM in Social Media Context. ResearchGate. https://www.researchgate.net/publication/339415176_The_Role_of_Motivational_Factors_for_Determining_Attitude_Towards_eWOM_in_Social_Media_Context

Ayeh, J. K., Au, N., & Law, R. (2013). Predicting the intention to use consumer-generated media for travel planning. Tourism Management, 35, 132–143. https://doi.org/10.1016/j.tourman.2012.06.010

Bae, S., & Lee, T. (2011). Product type and consumers' perception of online consumer reviews. Electronic Markets, 21, 255–266. https://doi.org/10.1007/s12525-011-0072-0

Bahtar, A. Z., & Muda, M. (2016). The Impact of User – Generated Content (UGC) on Product Reviews towards Online Purchasing – A Conceptual Framework. Procedia Economics and Finance, 37, 337–342. https://doi.org/10.1016/S2212-5671(16)30134-4

Baker, M. J. (2001). *Marketing: Critical Perspectives on Business and Management*. Taylor & Francis.

Ballantine, P. W., & Au Yeung, C. (2015). The effects of review valence in organic versus sponsored blog sites on perceived credibility, brand attitude, and behavioural intentions. Marketing Intelligence & Planning, 33(4), 508–521. https://doi.org/10.1108/MIP-03-2014-0044

Baron, R. M., & Kenny, D. A. (1986). *Baron and Kenny's Method for Mediation—Statistics Solutions*. Retrieved 2 July, 2020 from https://www.statisticssolutions.com/baron-and-kennys-method-for-mediation/

Barry, T. E., & Howard, D. J. (1990). A Review and Critique of the Hierarchy of Effects in Advertising. International Journal of Advertising. https://doi.org/10.1080/02650487.1990.11107138

Blackwell, R. D., Engel, J. F., & Miniard, P. W. (2001). *Consumer behavior (9th ed). Ft. Worth, Tex.* : Harcourt College Publishers. https://trove.nla.gov.au/work/10524553

Burghard, U., & Dütschke, E. (2019). Who wants shared mobility? Lessons from early adopters and mainstream drivers on electric carsharing in Germany. Transportation Research Part D: Transport and Environment, 71, 96–109. https://doi.org/10.1016/j.trd.2018.11.011

Burkhardt, J. E., & Millard-Ball, A. (2006). Who is Attracted to Carsharing? Transportation Research Record, 1986(1), 98–105. https://doi.org/10.1177/0361198106198600113

Buttle, F. (1998). Word of mouth: Understanding and managing referral marketing. Journal of Strategic Marketing, 6, 241–254. https://doi.org/10.1080/096525498346658

Calculator.net. (2020). Sample Size Calculator. Retrieved 15 August, 2020 from https://www.calculator.net/sample-size-calculator.html?type=1&cl=95&ci=5&pp=50&ps=90000000&x=84&y=12

Casaló, L. V., Flavián, C., & Guinalíu, M. (2010). Determinants of the intention to participate in firm-hosted online travel communities and effects on consumer behavioral intentions. Tourism Management, 31(6), 898–911. https://doi.org/10.1016/j.tourman.2010.04.007

Casaló, L. V., Flavián, C., & Guinalíu, M. (2011). Understanding the intention to follow the advice obtained in an online travel community. Computers in Human Behavior, 27(2), 622–633. https://doi.org/10.1016/j.chb.2010.04.013

CBS. (2018a). Onderwijs—Cijfers—Maatschappij: Trends in Nederland 2018. Retrieved 8 August, 2020 from https://longreads.cbs.nl/trends18/maatschappij/cijfers/onderwijs

CBS. (2018b). *StatLine—Inkomen van personen; inkomensklassen, persoonskenmerken.* Retrieved 8 August, 2020 from https://opendata.cbs.nl/statline/?dl=D4D1#/CBS/nl/dataset/83931NED/table

CBS. (2019a). *StatLine—Bevolking; geslacht, leeftijd en burgerlijke staat, 1 januari.* Retrieved 8 August, 2020 from https://opendata.cbs.nl/statline/#/CBS/nl/dataset/7461BEV/table?fromstatweb

CBS. (2019b). *StatLine—Bevolking; kerncijfers*. Retrieved 8 August, 2020 from https://opendata.cbs.nl/statline/#/CBS/nl/dataset/37296ned/table?fromstatweb

CBS. (2020). *StatLine—Bevolking; onderwijsniveau; geslacht, leeftijd en migratieachtergrond*. Retrieved 8 August, 2020 from https://opendata.cbs.nl/statline/#/CBS/nl/dataset/82275NED/table?fromstatweb

Chaipradermsak, T. (2007). THE INFUENTIAL FACTORS ON CONSUMERS ' PURCHASING DECISION IN BANGKOK PET RETAILING BUSINESS. https://www.semanticscholar.org/paper/THE-INFUENTIAL-FACTORS-ON-CONSUMERS-%E2%80%99-PURCHASING-IN-Chaipradermsak/e27584b3a20a1faa51c98f091c5f02a469187979

Chan, I. C. C., Lam, L. W., Chow, C. W. C., Fong, L. H. N., & Law, R. (2017). The effect of online reviews on hotel booking intention: The role of reader-reviewer similarity. International Journal of Hospitality Management, 66, 54–65. https://doi.org/10.1016/j.ijhm.2017.06.007

Chen, S., & Jie, L. (2010). Examining Consumers' Willingness to Buy in Chinese Online Market. Journal of Computers, 5. https://doi.org/10.4304/jcp.5.5.815-824

Cheung, C., & Thadani, D. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. Decision Support Systems, 54, 461–470. https://doi.org/10.1016/j.dss.2012.06.008

Chevalier, J. A., & Mayzlin, D. (2006). The Effect of Word of Mouth on Sales: Online Book Reviews. Journal of Marketing Research, 43(3), 345–354. https://doi.org/10.1509/jmkr.43.3.345

Clark, D. (2013, May 3). *Using social media to map the consumer journey to the customer experience*. *MyCustomer*. Retrieved 2 February, 2020 from https://www.mycustomer.com/experience/engagement/using-social-media-to-map-the-consumer-journey-to-the-customer-experience

Computer Hope. (2018). *Who invented the Internet?* Retrieved 2 February, 2020 from https://www.computerhope.com/issues/ch001016.htm

Constantinides, E., & Holleschovsky, N. I. (2016). Impact of online product reviews on purchasing decisions. Proceedings of the 12th International Conference on Web Information Systems and Technologies, 271–278. https://doi.org/10.5220/0005861002710278

Court, D., Elzinga, D., Mulder, S., & Vetvik, O. J. (2009). The consumer decision journey. 11.

Cox, D. F., Harvard University, & Graduate School of Business Administration. (1967). *Risk taking and information handling in consumer behavior*. Division of Research, Graduate School of Business Administration, Harvard University.

Crow Knowledge Platform. (2019). *Autodelen wordt steeds normaler—CROW*. Retrieved 28 March, 2020

from https://www.crow.nl/over-crow/nieuws/2019/september/autodelen-wordt-steeds

Dellarocas, C. (2003). The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms. Management Science, 49(10), 1407–1424. https://doi.org/10.1287/mnsc.49.10.1407.17308

Di Pietro, L., Di Virgilio, F., & Pantano, E. (2012). Social network for the choice of tourist destination: Attitude and behavioural intention. Journal of Hospitality and Tourism Technology, 3(1), 60–76. https://doi.org/10.1108/17579881211206543

Dragon360. (2011, December 17). *Who Created AIDA? | Dragon360*. Retrieved 20 January, 2020 from https://www.dragon360.com/blog/who-created-aida/

Duan, W., Gu, B., & Whinston, A. B. (2008). The dynamics of online word-of-mouth and product sales-An empirical investigation of the movie industry. Journal of Retailing, 84(2), 233–242. https://doi.org/10.1016/j.jretai.2008.04.005

Dutch Cowboys. (2019, September 26). *Autodeelplatform SnappCar zet in op groei. DutchCowboys*. Retrieved 8 April, 2020 from https://www.dutchcowboys.nl/nieuws/autodeelplatform-snappcar-zet-in-op-groei

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes (pp. xxii, 794)*. Harcourt Brace Jovanovich College Publishers.

Edelman, D. C. (2010). *Branding in the Digital Age*. Harvard Business Review, 9.

El-Desouky, M. M. K. E. (2011). Exploring viral marketing and its impact on consumer buying behavior with implications for Egypt. http://erepository.cu.edu.eg/index.php/cutheses/thesis/view/8922

Ferraz, S. B., Buhamra, C., Laroche, M., & Veloso, A. R. (2017). GREEN PRODUCTS: A CROSS-CULTURAL STUDY OF ATTITUDE, INTENTION AND PURCHASE BEHAVIOR. RAM. Revista de Administração Mackenzie, 18(5), 12–38. https://doi.org/10.1590/1678-69712017/administracao.v18n5p12-38

Field, A. (2009). *Discovering Statistics Using SPSS*. SAGE Publications.

Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behaviour: An introduction to theory and research (Vol. 27).

Floh, A., Koller, M., & Zauner, A. (2013). Taking a deeper look at online reviews: The asymmetric effect of

valence intensity on shopping behaviour. Journal of Marketing Management, 29(5–6), 646–670. https://doi.org/10.1080/0267257X.2013.776620

Grande, T. (2014). Factor Analysis Using SPSS [Video]. Retrieved 28 May, 2019 from https://www.youtube.com/watch?v=pRA3Wapx7fY

Gadrey, J. (2000). The Characterization of Goods and Services: An Alternative Approach. | Request PDF. https://www.researchgate.net/publication/4785573_The_Characterization_of_Goods_and_Services_An_Alternative_Approach

George, C., & Scerri, J. (2016). *Web 2.0 and User-Generated Content.* Retrieved 24 December, 2019 from https://equinoxadvisory.com/wp-content/uploads/2016/12/web-2.0-and-user-generated-content.pdf

Harun, A. (2012). (1) The Influence of Environmental Knowledge and Concern on Green Purchase Intention the Role of Attitude as a Mediating Variable | Request PDF. ResearchGate. https://www.researchgate.net/publication/297312059_The_Influence_of_Environmental_Knowledge_and_Concern_on_Green_Purchase_Intention_the_Role_of_Attitude_as_a_Mediating_Variable

Hawapi, M. W., Sulaiman, Z., Abdul Kohar, U. H., & Talib, N. A. (2017). Effects of Perceived Risks, Reputation and Electronic Word of Mouth (E-WOM) on Collaborative Consumption of Uber Car Sharing Service. IOP Conference Series: Materials Science and Engineering, 215, 012019. https://doi.org/10.1088/1757-899X/215/1/012019

Hayes, F. (2019). *PROCESS. The PROCESS Macro for SPSS, SAS, and R.* Retrieved 5 May, 2020 from http://processmacro.org/version-history.html

Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & 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. https://doi.org/10.1002/dir.10073

Herr, P. M., Kardes, F. R., & Kim, J. (1991). Effects of Word-of-Mouth and Product-Attribute Information on Persuasion: An Accessibility-Diagnosticity Perspective. Journal of Consumer Research, 17(4), 454–462. https://doi.org/10.1086/208570

Infosurv Research. (2016, April 21). *6 Key Differences Between Services and Products. Infosurv.* Retrieved 13 April, 2020 from https://www.infosurv.com/6-key-differences-between-marketing-services-and-products/

Jalalkamali, M., & Nikbin, D. (2010). Jalalkamali, M., & Nikbin, D. (2010). The Effects of Motivation on Purchase Decision. Interdisciplinary Journal of Contemporary Research in business, 234-355.

Jalilvand, M. R., & Samiei, N. (2012). The Impact of Electronic Word of Mouth on a Tourism Destination Choice: Testing the Theory of Planned Behavior (TPB). Internet Research: Electronic Networking Applications and Policy, 22. https://doi.org/10.1108/10662241211271563

Jang, S., Prasad, A., & Ratchford, B. T. (2012). How consumers use product reviews in the purchase decision process. Marketing Letters, 23(3), 825–838. https://doi.org/10.1007/s11002-012-9191-4

Jun, G., & Jafaar, N. (2011). Jun, G., & Jaafar, N. I. 2011. A Study on Consumers' Attitude towards Online Shopping in China University of Malaya. International Journal of Business and Social Science, 2(22), 122–133.

Ketelaar, P. E., Willemsen, L. M., Sleven, L., & Kerkhof, P. (2015). The good, the bad and the expert: How consumer expertise affects review valence effects on purchase intentions in online product reviews. Journal of Computer-Mediated Communication, 20(6), 649–666. https://doi.org/10.1111/jcc4.12139

Khan, S. A., Hussin, S. R., & Abdul Hamid, A. B. (2018). Direction for Future Research in eWOM: Issues of Credibility, Format and Impact (SSRN Scholarly Paper ID 3490582). Social Science Research Network. https://papers.ssrn.com/abstract=3490582

Kloet, D. B. (2016, April 15). *User Generated Content | Epurple.* Retrieved 20 December, 2019 from https://www.epurple.nl/user-generated-content/

Kudeshia, C., & Kumar, A. (2017). Social eWOM: Does it affect the brand attitude and purchase intention of brands? Management Research Review, 40(3), 310–330. https://doi.org/10.1108/MRR-07-2015-0161

Kwan, C. (2006). An investigation on the factors affecting young Chinese consumers' decision-making behaviour towards casual wear purchase [Thesis, The Hong Kong Polytechnic University]. http://ira.lib.polyu.edu.hk/handle/10397/3945

Vargo L. S., & Lusch, R. (2008). (PDF) Service-dominant logic: Continuing the evolution | Robert Lusch—Academia.edu. https://www.academia.edu/13880763/Service-dominant_logic_continuing_the_evolution

Laforet, S., & Li, X. (2005). Consumers' attitudes towards online and mobile banking in China. International

Journal of Bank Marketing, 23(5), 362–380. https://doi.org/10.1108/02652320510629250

Lavidge, R. J., & Steiner, G. A. (1961). A Model for Predictive Measurements of Advertising Effectiveness. Journal of Marketing, 25(6), 59–62. JSTOR. https://doi.org/10.2307/1248516

Lee, H. Y., Qu, H., & Kim, Y. S. (2007). A study of the impact of personal innovativeness on online travel shopping behavior—A case study of Korean travelers. Tourism Management, 28(3), 886–897. https://doi.org/10.1016/j.tourman.2006.04.013

Lee, J., Park, D.-H., & 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. https://doi.org/10.1016/j.elerap.2007.05.004

Lee, M., Rodgers, S., & Kim, M. (2009). Effects of Valence and Extremity of eWOM on Attitude toward the Brand and Website. Journal of Current Issues & Research in Advertising, 31. https://doi.org/10.1080/10641734.2009.10505262

Lee, W., Xiong, L., & Hu, C. (2012). The effect of Facebook users' arousal and valence on intention to go to the festival: Applying an extension of the technology acceptance model. International Journal of Hospitality Management, 31(3), 819–827. https://doi.org/10.1016/j.ijhm.2011.09.018

Lemon, K. N., & Verhoef, P. C. (2016). Understanding Customer Experience Throughout the Customer Journey. Journal of Marketing, 80(6), 69–96. https://doi.org/10.1509/jm.15.0420

Lenth, R. V. (2007). *Post Hoc Power: Tables and Commentary*. 13.

Levitt, T. (2016). Marketing Intangible Products and Product Intangibles: Cornell Hotel and Restaurant Administration Quarterly. https://doi.org/10.1177/001088048102200209

Li, N., & Zhang, P. (2002). Consumer Online Shopping Attitudes and Behavior: An Assessment of Research.

Lin, C., Wu, Y.-S., & Chen, J.-C. V. (2013). ELECTRONIC WORD-OF-MOUTH: THE MODERATING ROLES OF PRODUCT INVOLVEMENT AND BRAND IMAGE. 19.

Lin, C.-Y., Fang, K., & Tu, C.-C. (2010). Predicting Consumer Repurchase Intentions to Shop Online. JCP, 5, 1527–1533. https://doi.org/10.4304/jcp.5.10.1527-1533

Liu, Y. (2006). Word-of-Mouth for Movies: Its Dynamics and Impact on Box Office Revenue (SSRN Scholarly Paper ID 1949819). Social Science Research Network.

https://papers.ssrn.com/abstract=1949819

Luca, M. (2016). User-Generated Content and Social Media. https://www.hbs.edu/faculty/pages/item.aspx?num=50700

Lusch, R., & L. Vargo, S. (2004). (PDF) Invited Commentaries on "Evolving to a New Dominant Logic for Marketing." https://www.researchgate.net/publication/252744577_Invited_Commentaries_on_Evolving_to_a_New_Dominant_Logic_for_Marketing

Lusch, R., & L. Vargo, S. (2006). (PDF) The service-dominant logic of marketing: Dialog, debate, and directions. https://www.researchgate.net/publication/235361148_The_service-dominant_logic_of_marketing_Dialog_debate_and_directions

Malhotra, N. K., & Birks, D. F. (2007). *Marketing research: An applied approach*. Upper Saddle River, NJ: Pearson Education. Pearson.

Mayzlin, D., Dover, Y., & Chevalier, J. (2014). Promotional Reviews: An Empirical Investigation of Online Review Manipulation. American Economic Review, 104(8), 2421–2455. https://doi.org/10.1257/aer.104.8.2421

McKinsey. (2009). *The consumer decision journey | McKinsey*. Retrieved 21 December, 2019 from https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/the-consumer-decision-journey

Michaelson, D., & Stacks, D. W. (2011). Standardization in Public Relations Measurement and Evaluation. Public Relations Journal, 5(2), 22.

Miller, K. (2016, March 30). *11 Advantages and Disadvantages of Longitudinal Studies. FutureofWorking.Com*. Retrieved 10 July, 2020 from https://futureofworking.com/11-advantages-and-disadvantages-of-longitudinal-studies/

Millward Brown. (2013). *Digital Drives Auto Shopping. Think with Google*. Retrieved 10 January, 2020 from https://www.thinkwithgoogle.com/consumer-insights/digital-drives-auto-shopping/

Mir, I. A., & Rehman, K. U. (2013). Factors affecting consumer attitudes and intentions toward user-generated product content on YouTube. Management & Marketing, 8(4). https://econpapers.repec.org/article/ephjournl/v_3a8_3ay_3a2013_3ai_3a4_3an_3a5.htm

Molenaar, P. D. C. (2012). *Shopping 3.0: Shopping, the Internet or Both?* Gower Publishing, Ltd.

Muñoz-Leiva, F., Hernández-Méndez, J., & Sánchez-Fernández, J. (2012). Generalising user behaviour in online travel sites through the Travel 2.0 website acceptance model. Online Information Review, 36, 879–902. https://doi.org/10.1108/14684521211287945

Murray, K. (1990). (1) (PDF) The Impact of Services Versus Goods on Consumers' Assessment of Perceived Risk and Variability. ResearchGate. https://www.researchgate.net/publication/225989546_The_Impact_of_Services_Versus_Goods_on_Consumers'_Assessment_of_Perceived_Risk_and_Variability

Myers, R. H. (1990). Classical and modern regression with applications /. PWS-KENT,.

Nielsen. (2015). *Recommendations From Friends Remain Most Credible Form of Advertising Among Consumers; Branded Websites Are the Second-Highest-Rated Form.* Retrieved 13 April, 2020 from https://www.nielsen.com/us/en/press-releases/2015/recommendations-from-friends-remain-most-credible-form-of-advertising

Nijland, H., & Van Meerkerk, J. (2017). Mobility and environmental impacts of car sharing in the Netherlands—ScienceDirect. https://www.sciencedirect.com/science/article/abs/pii/S2210422417300230?via%3Dihub

Nishishiba, M., Jones, M., & Kraner, M. (2014). Research Methods and Statistics for Public and Nonprofit Administrators: A Practical Guide. SAGE Publications, Inc. https://doi.org/10.4135/9781544307763

Nosita, F., & Lestari, T. (2019). The Influence of User Generated Content and Purchase Intention on Beauty Products. GATR Journal of Management and Marketing Review, 4(3), 171–183. https://doi.org/10.35609/jmmr.2019.4.3(2)

O'Reilly, T. (2005). *What Is Web 2.0.* Retrieved 18 December, 2019 from https://oreilly.com

Panne, F. (2017). Online vs. Offline Marketing in the Decision-Making Stages: Evidence from the Automotive Industry in the Netherlands. https://thesis.eur.nl/pub/40131

Park, C., & Lee, T. M. (2009). Antecedents of Online Reviews' Usage and Purchase Influence: An Empirical Comparison of U.S. and Korean Consumers. Journal of Interactive Marketing, 23(4), 332–340. https://doi.org/10.1016/j.intmar.2009.07.001

Park, D.-H., & Kim, S. (2008). The effects of consumer knowledge on message processing of electronic

word-of-mouth via online consumer reviews. Electronic Commerce Research and Applications, 7(4), 399–410. https://doi.org/10.1016/j.elerap.2007.12.001

Park, D.-H., & Lee, J. (2008). EWOM overload and its effect on consumer behavioral intention depending on consumer involvement. Electronic Commerce Research and Applications, 7, 386–398. https://doi.org/10.1016/j.elerap.2007.11.004

Parry, G., Newnes B., L., & Huang, X. (2011). Goods, Products and Services. https://www.researchgate.net/publication/225830366_Goods_Products_and_Services

Paundra, J., Rook, L., van Dalen, J., & Ketter, W. (2017). Preferences for car sharing services: Effects of instrumental attributes and psychological ownership. Journal of Environmental Psychology, 53, 121–130. https://doi.org/10.1016/j.jenvp.2017.07.003

Peek, S. (2019, September 9). *Differences in Selling Products and Services*. Retrieved 8 April, 2020 from https://www.uschamber.com/co/grow/sales/differences-in-selling-products-and-services

Pink, D. H. (2013). *To Sell Is Human: The Surprising Truth About Moving Others (Reprint edition).* Riverhead Books.

Porter, M. (2017). WOM Or eWOM, Is There A Difference?: An Extension of the Social Communication Theory to Consumer Purchase Related Attitudes. 113.

Ramirez, D. (2020, March 26). *User-generated content vs eWord-of-Mouth (UGC vs eWOM). The TINT Blog*. Retrieved 4 June, 2020 from https://www.tintup.com/blog/user-generated-content-vs-eword-of-mouth-ugc-vs-ewom/

Reza, J. M., & Samiei, N. (2012). The effect of electronic word of mouth on brand image and purchase intention: An empirical study in the automobile industry in Iran. Marketing Intelligence & Planning, 30(4), 460–476. https://doi.org/10.1108/02634501211231946

Reza Jalilvand, M., Samiei, N., Dini, B., & Yaghoubi Manzari, P. (2012). Examining the structural relationships of electronic word of mouth, destination image, tourist attitude toward destination and travel intention: An integrated approach. Journal of Destination Marketing & Management, 1(1), 134–143. https://doi.org/10.1016/j.jdmm.2012.10.001

RouĊkova, V. (2015). Social media in customer decision-making process – the role of reviews. 77.

Schiffman, L. G., & Kanuk, L. L. (2007). *Consumer behavior*. Pearson Prentice Hall.

Shabeen, S., Cohen, A., & Jaffee, M. (2018). Innovative Mobility Carsharing Outlook – Spring 2018 | Innovative Mobility Research. http://innovativemobility.org/?project=innovative-mobility-carsharing-outlook-spring-2018

Shabeen, S., Cohen, A., & Roberts, J. (2016). *Shared Mobility Current Practices and Guiding Principles*. 120.

Shaghaghi, A., Aziz Sheikh, & Raj S Bhopal. (2011). Approaches to Recruiting 'Hard-To-Reach' Populations into Re-search: A Review of the Literature. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3963617/

Siahailatua, G. (2010). The impact of online reviews on consumer attitudes: The moderating role of Trust and Consumer Knowledge. 19.

Simonson, I., & Rosen, E. (2014). What marketers misunderstand about online reviews. Harvard Business Review, 92(1), 7.

Stackla. (2018, February 4). *Automotive. Stackla*. Retrieved 17 December, 2019 from https://stackla.com/industry-solutions/automotive/

Statistiek, C. B. voor de. (2020). *Personenauto's. Centraal Bureau voor de Statistiek*. Retrieved 8 May, 2020 from https://www.cbs.nl/nl-nl/maatschappij/verkeer-en-vervoer/transport-en-mobiliteit/infra-en-vervoermiddelen/vervoermiddelen/categorie-vervoermiddelen/personenauto-s

Stephanie. (2015, April 28). *Statistical Power: What it is, How to Calculate it. Statistics How To*. Retrieved 28 July, 2020 from https://www.statisticshowto.com/statistical-power/

Tang, C. S. (2019). *Springer Series in Supply Chain Management.* Retrieved 4 April, 2020 from https://www.springer.com/series/13081

Torlak, Ö., Özkara, B., Tiltay, M., Cengiz, H., & Dülger, M. (2014). The Effect of Electronic Word of Mouth on Brand Image and Purchase Intention: An Application Concerning Cell Phone Brands for Youth Consumers in Turkey. Journal of Marketing Development and Competitiveness.

Transportation Research Board, & National Academies of Sciences, E., and Medicine. (2005). Car-Sharing: Where and How It Succeeds. The National Academies Press. https://doi.org/10.17226/13559

van Gennip, R. (2020, April 19). *A. Beschrijvende statistiek*. Gryphem. Retrieved 8 July, 2020 from https://gryphemscriptiebegeleiding.wordpress.com/beschrijvende-statistiek/

van Gils, L. (2018). The effect of online reviews on purchase intention: The role of content valence and source on the Instagram platform. https://thesis.eur.nl/pub/46115

Vázquez, S., Muñoz-García, Ó., Campanella, I., Poch, M., Fisas, B., Bel, N., & Andreu, G. (2014). A classification of user-generated content into consumer decision journey stages. Neural Networks, 58, 68–81. https://doi.org/10.1016/j.neunet.2014.05.026

Vega, N. (2017). Here's why user reviews on sites like Amazon are such a big deal. Business Insider. Retrieved 3 March, 2020 from https://www.businessinsider.com/amazon-reviews-greatly-impact-online-shopping-sales-2017-3

Vellios, A. (2018). The impact of user-generated content on the evaluation stage of a car buyer. https://thesis.eur.nl/pub/45352

Verhellen, Y., Dens, N., & De Pelsmacker, P. (2013). Consumer responses to brands placed in YouTube movies: The effect of prominence and endorser expertise. JOURNAL OF ELECTRONIC COMMERCE RESEARCH, 14(4), 287–303.

Vermeulen, I., & Seegers, D. (2009). Tried and Tested: The Impact of Online Hotel Reviews on Consumer Consideration. Tourism Management, 30, 123–127. https://doi.org/10.1016/j.tourman.2008.04.008

Wang, C. (2015). Do People Purchase What They Viewed from Youtube? : The Influence of Attitude and Perceived Credibility of User-Generated Content on Purchase Intention. https://diginole.lib.fsu.edu/islandora/object/fsu%3A253059/

Weve Automotive. (2017). *Weve Primary Automotive Research 2017.* Retrieved 22 December, 2019 from https://www.iabuk.com/sites/default/files/research-docs/Weve%20Automotive%20Research%202017.pdf

Wijaya, B. S. (2012). The Development of Hierarchy of Effects Model in Advertising. International Research Journal of Business Studies, 5, 73–85. https://doi.org/10.21632/irjbs.5.1.73-85

Winston-Salem State University. (2019). *Key Elements of a Research Proposal—Quantitative Design*. 3.

Wolny, J., & Charoensuksai, N. (2014). Mapping customer journeys in multichannel decision-making. Journal of Direct, Data and Digital Marketing Practice, 15(4), 317–326. https://doi.org/10.1057/dddmp.2014.24

Wu, M. (2013). Relationships among Source Credibility of Electronic Word of Mouth, Perceived Risk, and

Consumer Behavior on Consumer Generated Media. 90.

Wu, Y., & Wu, J. (2016). The Impact of User Review Volume on Consumers' Willingness-to-Pay: A Consumer Uncertainty Perspective. Journal of Interactive Marketing, 33, 43–56. https://doi.org/10.1016/j.intmar.2015.11.001

Yang, H., & Yoo, Y. (2004). It's all about attitude: Revisiting the technology acceptance model. Decision Support Systems, 38(1), 19–31. https://doi.org/10.1016/S0167-9236(03)00062-9

Yang, J., Sarathy, R., & Lee, J. (2016). The effect of product review balance and volume on online Shoppers' risk perception and purchase intention. Decision Support Systems, 89, 66–76. https://doi.org/10.1016/j.dss.2016.06.009

Yang, J., Sarathy, R., & Walsh, S. M. (2016). Do review valence and review volume impact consumers' purchase decisions as assumed? Nankai Business Review International, 7(2), 231–257. https://doi.org/10.1108/NBRI-11-2015-0028

Yaylc, A., & Bayram, M. (2012). E-WOM: The effects of online consumer reviews on purchasing decisions. International Journal of Internet Marketing and Advertising, 7. https://doi.org/10.1504/IJIMA.2012.044958

Zainal, N. T. A., Harun, A., & Lily, J. (2017). Examining the mediating effect of attitude towards electronic words-of mouth (eWOM) on the relation between the trust in eWOM source and intention to follow eWOM among Malaysian travellers. Asia Pacific Management Review, 22(1), 35–44. https://doi.org/10.1016/j.apmrv.2016.10.004

Zeithhaml, V. A. (1981). (1) (PDF) How Consumer Evaluation Processes Differ Between Goods and Services. ResearchGate. https://www.researchgate.net/publication/235363095_How_Consumer_Evaluation_Processes_Differ_Between_Goods_and_Services

Zhang, K. Z. K., Zhao, S. J., Cheung, C. M. K., & Lee, M. K. O. (2014). Examining the influence of online reviews on consumers' decision-making: A heuristic-systematic model. Decision Support Systems, 67, 78–89. https://doi.org/10.1016/j.dss.2014.08.005

Appendix

Appendix A: Survey measurement items (Dutch and English)

Nr.	Vraag:
	eWOM kwantiteit (Volume) *De volgende stellingen gaan over het kopen van een auto (product) of het kiezen voor een deelauto (dienst). Geef aan in welke mate u het eens bent met elke stelling. Kies uit:* *0----------0----------0----------0----------0* *1. Helemaal mee oneens 2. Oneens 3. Neutraal 4. Mee eens 5. Sterk mee eens*
1	*Een grote hoeveelheid aan online getoonde recensies geeft aan dat het product/ de dienst populair is.* *The number of online reviews/comments is large, inferring that the product/service is popular.*
2	*Een hoge ranking of sterke aanbeveling geeft aan dat het product/de dienst een goede reputatie heeft.* *Highly ranking and recommendation, inferring that the product/service has good reputations.*
3	*Hoe meer het product/de dienst genoemd wordt in mijn aanwezigheid, hoe meer dit mijn aankoopbeslissing beïnvloedt* *The more the product/service is mentioned in front of me the more it influences my purchasing decision.*
4	*Hoe meer het product/de dienst wordt bediscussieerd in mijn aanwezigheid, hoe meer dit mijn aankoopbeslissing beïnvloedt.* *The more the product/service is discussed in front of me the more it influences my purchasing decision.*
	eWOM Kwaliteit (Valence) *De volgende stellingen gaan over het kopen van een auto (product) of het kiezen voor een deelauto (dienst). Geef aan in welke mate u het eens bent met elke stelling. Kies uit:* *0----------0----------0----------0----------0* *1. Helemaal mee oneens 2. Oneens 3. Neutraal 4. Mee eens 5. Sterk mee eens*
1	*Ik vertrouw op online recensies met zeer hoge of zeer lage beoordelingen voor het product/de dienst.* *I rely on reviews with very high or very low ratings for the product/service.*
2	*Ik vertrouw op online recensies die een regelmatig en/of samenhangend beeld geven, zowel positief als negatief.* *I rely on consistent reviews even positively or negatively.*
3	*Algemene beoordelingen over het product/ de dienst helpen mij om snel een keuze te maken tussen verschillende alternatieven.* *(Overall product/service) rankings help me to quickly select the best choice among several alternatives.*
	Aankoop Beslissing (Purchase Decision): *De volgende stellingen gaan over het kopen van een auto (product) of het kiezen voor een deelauto (dienst). Geef aan in welke mate u het eens bent met elke stelling. Kies uit:* *0----------0----------0----------0----------0* *1. Helemaal mee oneens 2. Oneens 3. Neutraal 4. Mee eens 5. Sterk mee eens*
1	*Eerdere recensies over het product/ de dienst beïnvloeden mijn bereidheid om een (aankoop) beslissing te maken.* *Previous reviews on the product/service affect my willingness to make a (purchase) decision*
2	*Als ik denk dat het product/dienst dezelfde goede (slechte) service biedt als in de beschreven online recensies, ben ik (niet) bereid om een beslissing te nemen.* *When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision.*
3	*Ik kies mijn product/dienst aan de hand van online recensies die ik lees.* *I choose my product/service upon reviews which I read.*
4	*Online verkregen informatie beïnvloedt mijn aankoopbeslissing.* *Information I receive online influence my purchase decision.*
	eWOM Houding (Attitude) *De volgende stellingen gaan over het kopen van een auto (product) of het kiezen voor een deelauto (dienst). Geef aan in welke mate u het eens bent met elke stelling. Kies uit:* *0----------0----------0----------0----------0* *1. Helemaal mee oneens 2. Oneens 3. Neutraal 4. Mee eens 5. Sterk mee eens*
1	*Ik heb een positieve mening over online verkregen recensies.* *I have a positive opinion about the reviews obtained online.*
2	*Ik denk dat het nuttig zou zijn om online verkregen recensies te volgen.* *I think following the reviews obtained online would be beneficial for me.*
3	*Over het algemeen is mijn houding positief ten opzichte van online verkregen recensies.* *Overall, my attitude towards the reviews obtained online is favorable.*
4	*Ik vind online verkregen recensies prettig.* *I like the reviews obtained online.*
5	*Ik denk dat het goed voor mij zou zijn om online verkregen recensies te volgen.* *I think following the reviews obtained online would be good for me.*

Appendix B: Questionnaire

eWOM - Purchase Decision (survey)

Start of Block: Introduction

Q1 Beste Respondent,

Bedankt voor het meewerken aan mijn afstudeeronderzoek, welke onderdeel is van het afronden van mijn Master studie Marketing aan de Erasmus Universiteit Rotterdam. Het invullen van de enquête duurt hoogstens 5 minuten. Alle verkregen gegevens worden volledig betrouwbaar en anoniem verwerkt!

Heeft u in de afgelopen 3 jaar een auto aangeschaft of gebruik gemaakt van een 'gedeelde' auto? Dan zou ik u graag willen verzoeken om deze enquête in te vullen.

Houdt er rekening mee dat een **product** in deze enquête verwijst naar een auto-aankoop en dat het gebruiken van een deelauto kan worden beschouwd als **service.**
Sommige vragen hebben betrekking op het gebruik van gedeelde auto's van een autodeelinitiatief.
Organisaties die onder het autodeel initiatief vallen zijn: SnappCar, MyWheels, ConnectCar, StudentCar, GreenWheels, Stapp.in, OproepAuto, Witkar en Car2Go (zie overzicht op www.ritjeweg.nl).
Voor vragen en / of opmerkingen kunt u mij een bericht sturen op onderstaand e-mailadres:

544903rh@eur.nl

Opmerking: geef antwoord op basis van uw gedrag vóór februari 2020 (vóór de COVID-19-periode).

End of Block: Introduction

Start of Block: Filter Participation

Q2 **Heeft u de afgelopen 3 jaar een auto gekocht en / of een "deelauto" gebruikt van een autodeelinitiatief?**

- ○ Ja (1)
- ○ Nee (einde enquête) (2)

End of Block: Filter Participation

Start of Block: Demographic variables

*

Q4 **Wat is uw leeftijd?**

_____

Q5 **Wat is uw geslacht?**

- ○ Man (1)
- ○ Vrouw (2)
- ○ Anders (3)

Q6 **Wat is uw maandelijks (bruto) inkomen?**

- ○ Minder dan €1000 (1)
- ○ €1000 - €2000 (2)
- ○ €2001 - €3000 (3)
- ○ €3001 - €4000 (4)
- ○ €4001 - €5000 (5)
- ○ Meer dan €5000 (6)

Q7 **Wat is uw hoogst genoten (afgeronde) opleiding?**

- ○ Ik heb geen diploma (1)
- ○ Middelbaar onderwijs (2)
- ○ MBO (3)
- ○ HBO (4)
- ○ Wetenschappelijk onderwijs (bachelor) (5)
- ○ Wetenschappelijk onderwijs (master) (6)
- ○ Doctoraat (7)

End of Block: Demographic variables

Start of Block: Information eWOM

Q8 Verschillende vragen gaan over online recensies (beoordelingen). U kunt online beoordelingen beschouwen als de mening van anderen over een product of dienst. consumenten delen dit vaak op verschillende (online) kanalen: forums, blogs, Google, verschillende websites of social media (d.w.z. Facebook, Twitter etc.).
Hieronder volgt een voorbeeld:

End of Block: Information eWOM

Start of Block: Additional data questions

Q9 **Geef uw mate van activiteit aan bij de volgende stelling:**

	Nooit (1)	Zelden (2)	Soms (3)	Best vaak (4)	Heel erg vaak (5)
Hoe vaak maakt u gebruik van online recensies alvorens u een (aankoop) beslissing maakt? (11)	○	○	○	○	○

Q10 **Welk soort online recensies gebruikt u voornamelijk voor het maken van een (aankoop)beslissing? (meerdere antwoorden mogelijk)**

- [ ] Kwalitatieve recensies (tekst of video) (1)
- [ ] Kwantitatieve recensies (schaalbeoordeling, sterrenbeoordeling 1-5) (2)

Q11 **Wanneer je gebruik maakt van online recensies, welke platformen gebruik je dan meestal? (meerdere antwoorden mogelijk)**

- [ ] Website van een bedrijf (1)
- [ ] Onafhankelijke beoordeling platforms (TrustPilot etc.) (2)
- [ ] Video platforms (bijv. YouTube) (3)
- [ ] Persoonlijke blogs (4)
- [ ] Anders (5)

End of Block: Additional data questions

Start of Block: eWOM attitude

Q12 **De volgende stellingen gaan over het kopen van een auto (product) of het kiezen voor een deelauto (dienst). Geef aan in welke mate u het eens bent met elke stelling. Kies uit:**

1. Sterk mee oneens
2. Oneens
3. Neutraal
4. Mee eens

5. Sterk mee eens

	Sterk mee oneens (1)	Oneens (2)	Neutraal (3)	Eens (4)	Sterk mee eens (5)
Ik heb een positieve mening over online verkregen recensies (1)	○	○	○	○	○
Ik denk dat het nuttig zou zijn om online verkregen recensies te volgen (2)	○	○	○	○	○
Over het algemeen is mijn houding positief ten opzichte van online verkregen recensies (3)	○	○	○	○	○
Ik vind online verkregen recensies prettig (4)	○	○	○	○	○
Ik denk dat het goed voor mij zou zijn om online verkregen recensies te volgen (5)	○	○	○	○	○

End of Block: eWOM attitude

Start of Block: eWOM Volume

Q14 De volgende stellingen gaan over het kopen van een auto (product) of het kiezen voor een deelauto (dienst). Geef aan in welke mate u het eens bent met elke stelling. Kies uit:

1. Sterk mee oneens
2. Oneens
3. Neutraal

4. Mee eens
5. Sterk mee eens

	Sterk mee oneens (1)	Oneens (2)	Neutraal (3)	Eens (4)	Sterk mee eens (5)
Een grote hoeveelheid aan online getoonde recensies geeft aan dat het product/ de dienst populair is (1)	○	○	○	○	○
Een hoge ranking of sterke aanbeveling geeft aan dat het product/de dienst een goede reputatie heeft (2)	○	○	○	○	○
Hoe meer het product/de dienst genoemd wordt in mijn aanwezigheid, hoe meer dit mijn aankoopbeslissing beïnvloedt (3)	○	○	○	○	○
Hoe meer het product/de dienst wordt bediscussieerd in mijn aanwezigheid, hoe meer dit mijn aankoopbeslissing beïnvloedt (4)	○	○	○	○	○

End of Block: eWOM Volume

Start of Block: eWOM Valence

Q15 De volgende stellingen gaan over het kopen van een auto (product) of het kiezen voor een deelauto (dienst). Geef aan in welke mate u het eens bent met elke stelling. Kies uit:

1. Sterk mee oneens
2. Oneens
3. Neutraal

4. Mee eens
5. Sterk mee eens

	Sterk mee oneens (1)	Oneens (2)	Neutraal (3)	Eens (4)	Sterk mee eens (5)
Ik vertrouw op online recensies met zeer hoge of zeer lage beoordelingen voor het product/de dienst (1)	○	○	○	○	○
Ik vertrouw op online recensies die een regelmatig en/of samenhangend beeld geven, zowel positief als negatief (2)	○	○	○	○	○
Algemene beoordelingen over het product/ de dienst helpen mij om snel een keuze te maken tussen verschillende alternatieven (3)	○	○	○	○	○

End of Block: eWOM Valence

Start of Block: Purchase Decision

Q16 De volgende stellingen gaan over het kopen van een auto (product) of het kiezen voor een deelauto (dienst). Geef aan in welke mate u het eens bent met elke stelling. Kies uit:

1. Sterk mee oneens
2. Oneens
3. Neutraal

4. Mee eens
5. Sterk mee eens

	Sterk mee oneens (1)	Oneens (2)	Neutraal (3)	Eens (4)	Sterk mee eens (5)
Eerdere recensies over het product/ de dienst beïnvloeden mijn bereidheid om een (aankoop) beslissing te maken (1)	○	○	○	○	○
Als ik denk dat het product/dienst dezelfde goede (slechte) service biedt als in de beschreven online recensies, ben ik (niet) bereid om een beslissing te nemen (2)	○	○	○	○	○
Ik kies mijn product/dienst aan de hand van online recensies die ik lees (3)	○	○	○	○	○
Online verkregen informatie beïnvloedt mijn aankoopbeslissing (13)	○	○	○	○	○

End of Block: Purchase Decision

Start of Block: Filter choice

Q17 **Welke situatie is voor uw van toepassing?**

- ○ Ik heb in de afgelopen 3 jaar een auto aangekocht (1)
- ○ Ik heb in de afgelopen 3 jaar een ‘deelauto’ gebruikt (2)
- ○ Ik heb beide gedaan (4)

End of Block: Filter choice

Start of Block: Extra

Q16
Heeft u verder nog vragen en/of opmerkingen? Typ dit hieronder

_____

End of Block: Extra

Appendix C: Output SPSS

Appendix C.1: Sample distribution

Gender	N	%N
Male	84	47,5%
Female	93	52,5%
Other	0	0%
Total	**177**	**100%**
Income	N	%N
Less than €1000	42	23,7%
€1000 - €2000	38	21,5%
€2001 - €3000	40	22,6%
€3001 - €4000	29	16,4%
€4001 - €5000	15	8,5%
More than €5000	13	7,3%
Total	**177**	**100%**
Education	N	%N
No education	3	1,7%
High school	22	12,4%
Intermediate vocational training	40	22,6%
Higher vocational training	41	23,2%
Scientific education (bachelor)	40	22,6%
Scientific education (master)	30	16,9%
Doctorate (PhD)	1	0,60%
Total	**177**	**100%**
Age	N	%N
18-24	51	28,8%
25-34	51	28,8%
35-44	27	15,3%
45-54	22	12,4%
55-64	22	12,4%
65-74	4	2,3%
75+	0	0%
Total	**177**	**100%**

Appendix C.2: Descriptive statistics scale variables of the conceptual model

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ATTITUDE	177	1,00	5,00	3,6746	,62220	-,588	,183	1,760	,363
VOLUME	177	1,00	5,00	3,3277	,83596	-,658	,183	-,083	,363
VALENTIE	177	1,00	5,00	3,5932	,65636	-,772	,183	1,020	,363
PURCH_DEC	177	1,00	5,00	3,7401	,83273	-,614	,183	,268	,363
Valid N (listwise)	177								

Appendix C.3: Descriptive other questions (age and usage statement)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
What is your age?	177	18,00	74,00	35,5763	13,90782	,779	,183	-,593	,363
Please state your level of recognition with the following statement:-How often are you checking online customer reviews before you make a (purchase) decision?	177	1	5	3,54	1,055	-,450	,183	-,459	,363
Valid N (listwise)	177								

Appendix C.4: Frequency tables of nominal and ordinal measures (including created dummies)

1

geslacht

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	man	84	47,5	47,5	47,5
	vrouw	93	52,5	52,5	100,0
	Total	177	100,0	100,0	

2

inkomen

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	minder dan 1000	42	23,7	23,7	23,7
	1000 tot 2000	38	21,5	21,5	45,2
	2001 tot 3000	40	22,6	22,6	67,8
	3001 tot 4000	29	16,4	16,4	84,2
	4001 tot 5000	15	8,5	8,5	92,7
	meer dan 5000	13	7,3	7,3	100,0
	Total	177	100,0	100,0	

3

opleiding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	geen opleiding	3	1,7	1,7	1,7
	voortgezet onderwijs	22	12,4	12,4	14,1
	MBO	40	22,6	22,6	36,7
	HBO	41	23,2	23,2	59,9
	WO bachelor	40	22,6	22,6	82,5
	WO master	30	16,9	16,9	99,4
	PHD	1	,6	,6	100,0
	Total	177	100,0	100,0	

4

ACTIVITEIT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	6	3,4	3,4	3,4
	2,00	26	14,7	14,7	18,1
	3,00	44	24,9	24,9	42,9
	4,00	69	39,0	39,0	81,9
	5,00	32	18,1	18,1	100,0
	Total	177	100,0	100,0	

5

KEUZE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	auto gekocht	109	61,6	61,6	61,6
	deelauto gebruikt	60	33,9	33,9	95,5
	beiden	8	4,5	4,5	100,0
	Total	177	100,0	100,0	

6

KWALITATIEF

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	29	16,4	16,4	16,4
	1,00	148	83,6	83,6	100,0
	Total	177	100,0	100,0	

7

KWANTITATIEF

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	74	41,8	41,8	41,8
	1,00	103	58,2	58,2	100,0
	Total	177	100,0	100,0	

8

review_company

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	78	44,1	44,1	44,1
	1,00	99	55,9	55,9	100,0
	Total	177	100,0	100,0	

9

review_onafhankelijk

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	59	33,3	33,3	33,3
	1,00	118	66,7	66,7	100,0
	Total	177	100,0	100,0	

10

review_video

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	119	67,2	67,2	67,2
	1,00	58	32,8	32,8	100,0
	Total	177	100,0	100,0	

11

review_blogs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	132	74,6	74,6	74,6
	1,00	45	25,4	25,4	100,0
	Total	177	100,0	100,0	

12

review_overig

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	,00	152	85,9	85,9	85,9
	1,00	25	14,1	14,1	100,0
	Total	177	100,0	100,0	

13

dummy_keuzetijd

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	auto gekocht	109	61,6	64,5	64,5
	deelauto gebruikt	60	33,9	35,5	100,0
	Total	169	95,5	100,0	
Missing	System	8	4,5		
Total		177	100,0		

14

dummy_geslacht

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	anders	93	52,5	52,5	52,5
	man	84	47,5	47,5	100,0
	Total	177	100,0	100,0	

15

dummy_leeftijd

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	jonger dan 40 jaar	114	64,4	64,4	64,4
	40 jaar en ouder	63	35,6	35,6	100,0
	Total	177	100,0	100,0	

16

dummy_inkomen

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	onder modaal	80	45,2	45,2	45,2
	modaal en hoger	97	54,8	54,8	100,0
	Total	177	100,0	100,0	

17

dummy_opleiding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	geen of ondergemiddelde opleiding	65	36,7	36,7	36,7
	hoger opgeleid	112	63,3	63,3	100,0
	Total	177	100,0	100,0	

Appendix C.5: Tests of normality

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ATTITUDE	,112	177	,000	,959	177	,000
VOLUME	,230	177	,000	,898	177	,000
VALENTIE	,155	177	,000	,945	177	,000
PURCH_DEC	,312	177	,000	,843	177	,000

a. Lilliefors Significance Correction

Appendix C.6: Pearson correlation matrix

Correlations

		PURCH_DEC	ATTITUDE	VOLUME	VALENTIE	Age	Gender	Income	Education	dummy_opleiding	dummy_keuzetijd	Interactievalentie_meancentre	Interactievolume_meancentre
PURCH_DEC	Pearson Correlation	1	,507**	,245**	,550**	-,275**	,057	-,225**	,089	,044	,273**	-,118	-,030
	Sig. (2-tailed)		,000	,001	,000	,000	,453	,003	,241	,562	,000	,127	,698
	N	177	177	177	177	177	177	177	177	177	169	169	169
ATTITUDE	Pearson Correlation	,507**	1	,501**	,648**	-,336**	,129	-,200**	,128	,069	,294**	,033	,011
	Sig. (2-tailed)	,000		,000	,000	,000	,087	,008	,089	,362	,000	,673	,889
	N	177	177	177	177	177	177	177	177	177	169	169	169
VOLUME	Pearson Correlation	,245**	,501**	1	,462**	-,279**	,082	-,259**	-,016	-,052	,155*	-,103	-,042
	Sig. (2-tailed)	,001	,000		,000	,000	,279	,000	,828	,492	,045	,181	,592
	N	177	177	177	177	177	177	177	177	177	169	169	169
VALENTIE	Pearson Correlation	,550**	,648**	,462**	1	-,316**	,014	-,175*	,107	,052	,297**	-,062	-,098
	Sig. (2-tailed)	,000	,000	,000		,000	,850	,020	,157	,494	,000	,423	,206
	N	177	177	177	177	177	177	177	177	177	169	169	169
Age	Pearson Correlation	-,275**	-,336**	-,279**	-,316**	1	,067	,483**	-,174*	-,140	-,341**	,067	,003
	Sig. (2-tailed)	,000	,000	,000	,000		,374	,000	,021	,063	,000	,390	,970
	N	177	177	177	177	177	177	177	177	177	169	169	169
Gender	Pearson Correlation	,057	,129	,082	,014	,067	1	-,107	,023	-,043	,001	-,139	-,047
	Sig. (2-tailed)	,453	,087	,279	,850	,374		,156	,761	,567	,988	,071	,543
	N	177	177	177	177	177	177	177	177	177	169	169	169
Income	Pearson Correlation	-,225**	-,200**	-,259**	-,175*	,483**	-,107	1	,147	,094	-,287**	-,010	-,043
	Sig. (2-tailed)	,003	,008	,000	,020	,000	,156		,051	,213	,000	,897	,581
	N	177	177	177	177	177	177	177	177	177	169	169	169
Education	Pearson Correlation	,089	,128	-,016	,107	-,174*	,023	,147	1	,838**	,214**	,029	,058
	Sig. (2-tailed)	,241	,089	,828	,157	,021	,761	,051		,000	,005	,711	,451
	N	177	177	177	177	177	177	177	177	177	169	169	169
dummy_opleiding	Pearson Correlation	,044	,069	-,052	,052	-,140	-,043	,094	,838**	1	,103	,118	,173*
	Sig. (2-tailed)	,562	,362	,492	,494	,063	,567	,213	,000		,183	,126	,024
	N	177	177	177	177	177	177	177	177	177	169	169	169
dummy_keuzetijd	Pearson Correlation	,273**	,294**	,155*	,297**	-,341**	,001	-,287**	,214**	,103	1	,178*	,093
	Sig. (2-tailed)	,000	,000	,045	,000	,000	,988	,000	,005	,183		,021	,228
	N	169	169	169	169	169	169	169	169	169	169	169	169
Interactievalentie_meancentre	Pearson Correlation	-,118	,033	-,103	-,062	,067	-,139	-,010	,029	,118	,178*	1	,406**
	Sig. (2-tailed)	,127	,673	,181	,423	,390	,071	,897	,711	,126	,021		,000
	N	169	169	169	169	169	169	169	169	169	169	169	169
Interactievolume_meancentre	Pearson Correlation	-,030	,011	-,042	-,098	,003	-,047	-,043	,058	,173*	,093	,406**	1
	Sig. (2-tailed)	,698	,889	,592	,206	,970	,543	,581	,451	,024	,228	,000	
	N	169	169	169	169	169	169	169	169	169	169	169	169

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix C.7: Non-parametric correlations

Correlations

			PURCH_DEC	ATTITUDE	VOLUME	VALENTIE	Age	Gender	Income	Education	dummy_opleiding	dummy_keuzetijd	Interactievalentie_meancentre	Interactievolume_meancentre
Spearman's rho	PURCH_DEC	Correlation Coefficient	1,000	,462**	,215**	,519**	-,266**	,050	-,244**	,097	,056	,281**	-,094	-,002
		Sig. (2-tailed)	.	,000	,004	,000	,000	,511	,001	,199	,457	,000	,223	,982
		N	177	177	177	177	177	177	177	177	177	169	169	169
	ATTITUDE	Correlation Coefficient	,462**	1,000	,426**	,589**	-,322**	,098	-,223**	,180*	,149*	,321**	,024	-,014
		Sig. (2-tailed)	,000	.	,000	,000	,000	,194	,003	,017	,048	,000	,756	,862
		N	177	177	177	177	177	177	177	177	177	169	169	169
	VOLUME	Correlation Coefficient	,215**	,426**	1,000	,398**	-,275**	,055	-,283**	,002	-,024	,159*	-,119	-,230**
		Sig. (2-tailed)	,004	,000	.	,000	,000	,470	,000	,984	,753	,039	,122	,003
		N	177	177	177	177	177	177	177	177	177	169	169	169
	VALENTIE	Correlation Coefficient	,519**	,589**	,398**	1,000	-,319**	,000	-,222**	,114	,081	,304**	-,086	-,125
		Sig. (2-tailed)	,000	,000	,000	.	,000	,995	,003	,130	,283	,000	,269	,106
		N	177	177	177	177	177	177	177	177	177	169	169	169
	Age	Correlation Coefficient	-,266**	-,322**	-,275**	-,319**	1,000	,044	,553**	-,083	-,069	-,307**	,064	,037
		Sig. (2-tailed)	,000	,000	,000	,000	.	,558	,000	,272	,362	,000	,409	,637
		N	177	177	177	177	177	177	177	177	177	169	169	169
	Gender	Correlation Coefficient	,050	,098	,055	,000	,044	1,000	-,112	,017	-,043	,001	-,108	-,043
		Sig. (2-tailed)	,511	,194	,470	,995	,558	.	,138	,819	,567	,988	,163	,583
		N	177	177	177	177	177	177	177	177	177	169	169	169
	Income	Correlation Coefficient	-,244**	-,223**	-,283**	-,222**	,553**	-,112	1,000	,109	,090	-,315**	,007	-,009
		Sig. (2-tailed)	,001	,003	,000	,003	,000	,138	.	,147	,233	,000	,928	,910
		N	177	177	177	177	177	177	177	177	177	169	169	169
	Education	Correlation Coefficient	,097	,180*	,002	,114	-,083	,017	,109	1,000	,853**	,221**	,074	,097
		Sig. (2-tailed)	,199	,017	,984	,130	,272	,819	,147	.	,000	,004	,342	,211
		N	177	177	177	177	177	177	177	177	177	169	169	169
	dummy_opleiding	Correlation Coefficient	,056	,149*	-,024	,081	-,069	-,043	,090	,853**	1,000	,103	,119	,181*
		Sig. (2-tailed)	,457	,048	,753	,283	,362	,567	,233	,000	.	,183	,124	,018
		N	177	177	177	177	177	177	177	177	177	169	169	169
	dummy_keuzetijd	Correlation Coefficient	,281**	,321**	,159*	,304**	-,307**	,001	-,315**	,221**	,103	1,000	,227**	,146
		Sig. (2-tailed)	,000	,000	,039	,000	,000	,988	,000	,004	,183	.	,003	,057
		N	169	169	169	169	169	169	169	169	169	169	169	169
	Interactievalentie_meancentre	Correlation Coefficient	-,094	,024	-,119	-,086	,064	-,108	,007	,074	,119	,227**	1,000	,408**
		Sig. (2-tailed)	,223	,756	,122	,269	,409	,163	,928	,342	,124	,003	.	,000
		N	169	169	169	169	169	169	169	169	169	169	169	169
	Interactievolume_meancentre	Correlation Coefficient	-,002	-,014	-,230**	-,125	,037	-,043	-,009	,097	,181*	,146	,408**	1,000
		Sig. (2-tailed)	,982	,862	,003	,106	,637	,583	,910	,211	,018	,057	,000	.
		N	169	169	169	169	169	169	169	169	169	169	169	169

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix C.8: Regression output with moderation and mediation effects

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,291[a]	,085	,063	,80472
2	,624[b]	,389	,351	,66975

a. Predictors: (Constant), dummy_education, Gender, Income, Age

b. Predictors: (Constant), dummy_education, Gender, Income, Age, Interactievolume_meancentre, VALENTIE, dummy_choicetype, Interactievalentie_meancentre, VOLUME, ATTITUDE

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9,857	4	2,464	3,805	,006[b]
	Residual	106,202	164	,648		
	Total	116,059	168			
2	Regression	45,185	10	4,519	10,073	,000[c]
	Residual	70,874	158	,449		
	Total	116,059	168			

a. Dependent Variable: PURCH_DEC

b. Predictors: (Constant), dummy_education, Gender, Income, Age

c. Predictors: (Constant), dummy_education, Gender, Income, Age, Interactievolume_meancentre, VALENTIE, dummy_choicetype, Interactievalentie_meancentre, VOLUME, ATTITUDE

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	4,129	,279		14,801	,000		
	Gender	,124	,126	,074	,985	,326	,976	1,025
	Age	-,012	,005	-,206	-2,330	,021	,713	1,403
	Income	-,062	,049	-,112	-1,273	,205	,720	1,389
	dummy_education	,055	,133	,032	,417	,677	,938	1,066
2	(Constant)	1,146	,451		2,540	,012		
	Gender	,004	,108	,002	,037	,970	,917	1,091
	Age	,001	,005	,011	,133	,894	,617	1,621
	Income	-,051	,042	-,092	-1,226	,222	,684	1,463
	dummy_education	,027	,113	,016	,241	,810	,894	1,119
	VALENTIE	,475	,109	,381	4,360	,000	,507	1,973
	dummy_choicetype	,162	,122	,093	1,323	,188	,778	1,286
	VOLUME	-,130	,075	-,132	-1,733	,085	,669	1,494
	ATTITUDE	,384	,119	,290	3,217	,002	,476	2,102
	Interactievalentie_meancentre	-,435	,198	-,156	-2,195	,030	,766	1,306
	Interactievolume_meancentre	,099	,147	,047	,672	,503	,804	1,243

a. Dependent Variable: PURCH_DEC

Appendix C.9: Regression output with main effects and dummies and mediating variable

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,291[a]	,085	,063	,80472
2	,580[b]	,336	,307	,69176
3	,609[c]	,371	,339	,67567

a. Predictors: (Constant), dummy_education, Gender, Income, Age

b. Predictors: (Constant), dummy_education, Gender, Income, Age, VALENTIE, dummy_choicetype, VOLUME

c. Predictors: (Constant), dummy_education, Gender, Income, Age, VALENTIE, dummy_choicetype, VOLUME, ATTITUDE

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9,857	4	2,464	3,805	,006[b]
	Residual	106,202	164	,648		
	Total	116,059	168			
2	Regression	39,017	7	5,574	11,648	,000[c]
	Residual	77,043	161	,479		
	Total	116,059	168			
3	Regression	43,015	8	5,377	11,778	,000[d]
	Residual	73,045	160	,457		
	Total	116,059	168			

a. Dependent Variable: PURCH_DEC

b. Predictors: (Constant), dummy_education, Gender, Income, Age

c. Predictors: (Constant), dummy_education, Gender, Income, Age, VALENTIE, dummy_choicetype, VOLUME

d. Predictors: (Constant), dummy_education, Gender, Income, Age, VALENTIE, dummy_choicetype, VOLUME, ATTITUDE

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	4,129	,279		14,801	,000		
	Gender	,124	,126	,074	,985	,326	,976	1,025
	Age	-,012	,005	-,206	-2,330	,021	,713	1,403
	Income	-,062	,049	-,112	-1,273	,205	,720	1,389
	dummy_education	,055	,133	,032	,417	,677	,938	1,066
2	(Constant)	1,601	,435		3,680	,000		
	Gender	,090	,109	,054	,833	,406	,965	1,036
	Age	-,003	,005	-,042	-,530	,597	,642	1,557
	Income	-,048	,043	-,087	-1,122	,264	,689	1,451
	dummy_education	,020	,115	,012	,175	,861	,928	1,078
	VOLUME	-,056	,075	-,057	-,754	,452	,725	1,380
	VALENTIE	,657	,095	,527	6,883	,000	,704	1,420
	dummy_choicetype	,146	,123	,084	1,186	,237	,819	1,221
3	(Constant)	1,120	,455		2,462	,015		
	Gender	,041	,107	,025	,385	,701	,942	1,061
	Age	-,001	,005	-,015	-,194	,846	,633	1,579
	Income	-,047	,042	-,084	-1,111	,268	,689	1,451
	dummy_education	,011	,112	,006	,097	,923	,927	1,079
	VOLUME	-,115	,075	-,116	-1,518	,131	,675	1,481
	VALENTIE	,493	,108	,396	4,555	,000	,521	1,918
	dummy_choicetype	,112	,121	,065	,927	,355	,811	1,232
	ATTITUDE	,353	,119	,266	2,959	,004	,486	2,056

a. Dependent Variable: PURCH_DEC

Appendix C.10 (Exploratory) factor analysis output all variables (Varimax)

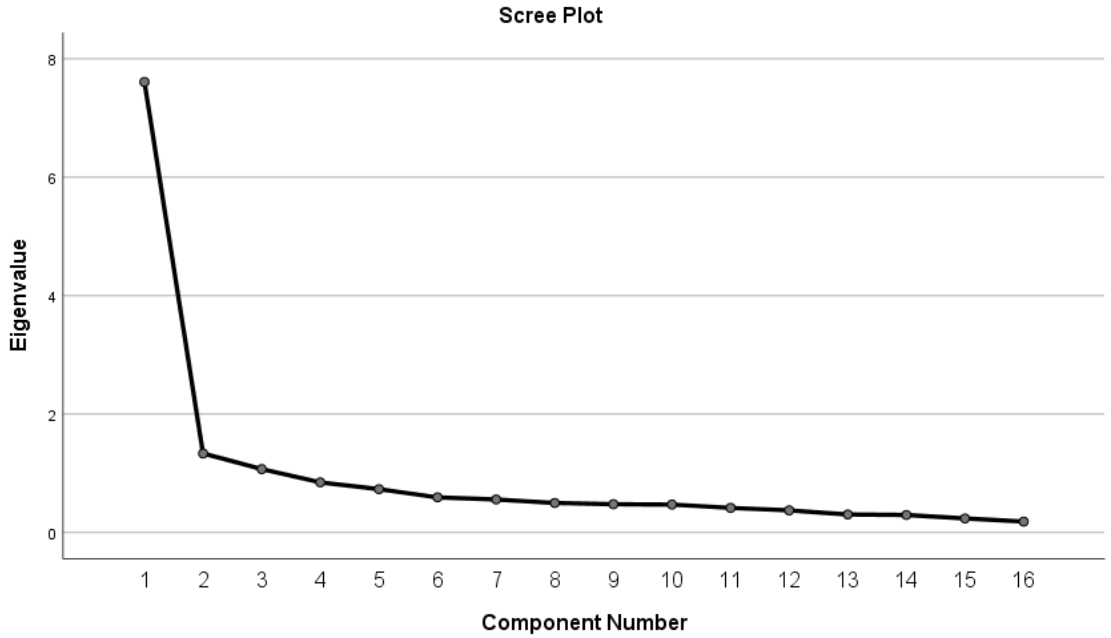
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,918
Bartlett's Test of Sphericity	Approx. Chi-Square	1492,001
	df	120
	Sig.	,000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7,607	47,545	47,545	7,607	47,545	47,545	3,630	22,689	22,689
2	1,335	8,342	55,887	1,335	8,342	55,887	3,227	20,171	42,860
3	1,071	6,691	62,578	1,071	6,691	62,578	3,155	19,718	62,578
4	,846	5,287	67,866						
5	,732	4,573	72,439						
6	,593	3,707	76,146						
7	,558	3,485	79,630						
8	,499	3,116	82,746						
9	,478	2,986	85,732						
10	,472	2,949	88,680						
11	,416	2,598	91,278						
12	,374	2,335	93,613						
13	,305	1,904	95,517						
14	,295	1,846	97,363						
15	,237	1,483	98,847						
16	,185	1,153	100,000						

Extraction Method: Principal Component Analysis.



The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I have a positive opinion about the reviews obtained online	0,718	0,254	0,284
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be beneficial for me	0,768	0,265	0,279
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Overall, my attitude towards the reviews obtained online is favorable	0,767	0,276	0,158
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I like (the) reviews obtained online	0,778	0,222	0,247
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be good for me	0,681	0,354	0,188
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The number of online reviews/comments is large, inferring that the product/service is popular	0,219	0,622	0,041
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Highly ranking and recommendation, inferring that the product/service has good reputations	0,475	0,347	0,395
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is mentioned in front of me the more it influences my purchasing decision	0,186	0,109	0,826
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is discussed in front of me the more it influences my purchasing decision	0,286	0,010	0,851
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on reviews with very high or very low ratings for the product/service	0,278	0,503	0,244
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on consistent reviews even positively or negatively	0,275	0,701	0,207
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-(Overall product/service) rankings help me to quickly select the best choice among several alternatives	0,293	0,454	0,479
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Previous reviews on the product/service affect my willingness to make a (purchase) decision	0,296	0,392	0,622
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision	0,254	0,780	0,076
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I choose my product/service upon reviews which I read	0,201	0,417	0,662
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Information I receive online influence my purchase decision	0,214	0,659	0,384

Appendix C.11 Exploratory factor analysis output with 4 items deleted (Varimax)

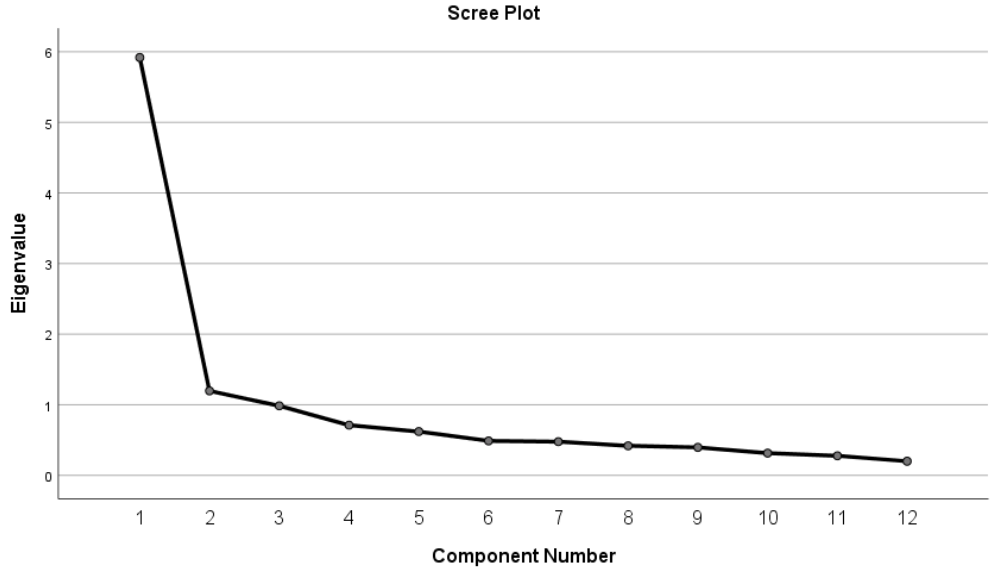
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,891
Bartlett's Test of Sphericity	Approx. Chi-Square	1058,430
	df	66
	Sig.	,000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5,918	49,318	49,318	5,918	49,318	49,318	4,778	39,815	39,815
2	1,196	9,967	59,285	1,196	9,967	59,285	2,336	19,470	59,285
3	,985	8,205	67,490						
4	,710	5,921	73,410						
5	,620	5,165	78,575						
6	,488	4,069	82,644						
7	,477	3,971	86,615						
8	,419	3,488	90,103						
9	,396	3,298	93,401						
10	,315	2,623	96,024						
11	,277	2,310	98,335						
12	,200	1,665	100,000						

Extraction Method: Principal Component Analysis.



The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I have a positive opinion about the reviews obtained online	0,667	0,365
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be beneficial for me	0,700	0,390
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Overall, my attitude towards the reviews obtained online is favorable	0,714	0,267
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I like (the) reviews obtained online	0,681	0,350
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be good for me	0,722	0,255
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is mentioned in front of me the more it influences my purchasing decision	0,202	0,875
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is discussed in front of me the more it influences my purchasing decision	0,209	0,896
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on reviews with very high or very low ratings for the product/service	0,576	0,208
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on consistent reviews even positively or negatively	0,732	0,110
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-(Overall product/service) rankings help me to quickly select the best choice among several alternatives	0,601	0,351
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision	0,752	-0,036
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Information I receive online influence my purchase decision	0,685	0,211

Appendix C.12 (Confirmatory) factor analysis output all variables (oblimin)

KMO and Bartlett's Test

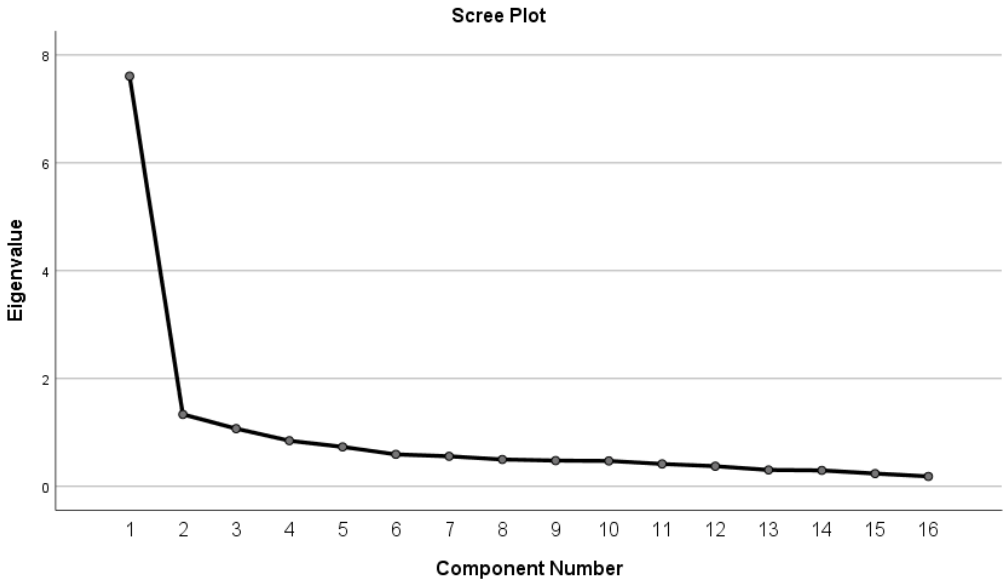
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,918
Bartlett's Test of Sphericity	Approx. Chi-Square	1492,001
	df	120
	Sig.	,000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	7,607	47,545	47,545	7,607	47,545	47,545	5,412
2	1,335	8,342	55,887	1,335	8,342	55,887	4,837
3	1,071	6,691	62,578	1,071	6,691	62,578	6,313
4	,846	5,287	67,866				
5	,732	4,573	72,439				
6	,593	3,707	76,146				
7	,558	3,485	79,630				
8	,499	3,116	82,746				
9	,478	2,986	85,732				
10	,472	2,949	88,680				
11	,416	2,598	91,278				
12	,374	2,335	93,613				
13	,305	1,904	95,517				
14	,295	1,846	97,363				
15	,237	1,483	98,847				
16	,185	1,153	100,000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor	1	2	3
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I have a positive opinion about the reviews obtained online	-.005	-.072	-.776
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be beneficial for me	-.011	-.050	-.838
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Overall, my attitude towards the reviews obtained online is favorable	.018	.088	-.862
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I like (the) reviews obtained online	-.062	-.017	-.873
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be good for me	.141	.040	-.718
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The number of online reviews/comments is large, inferring that the product/service is popular	.659	.110	-.065
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Highly ranking and recommendation, inferring that the product/service has good reputations	.188	-.256	-.405
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is mentioned in front of me the more it influences my purchasing decision	-.037	-.864	-.009
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is discussed in front of me the more it influences my purchasing decision	-.198	-.877	-.165
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on reviews with very high or very low ratings for the product/service	.469	-.121	-.133
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on consistent reviews even positively or negatively	.713	-.050	-.072
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-(Overall product/service) rankings help me to quickly select the best choice among several alternatives	.378	-.389	-.113
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Previous reviews on the product/service affect my willingness to make a (purchase) decision	.285	-.559	-.104
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision	.831	.103	-.048
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I choose my product/service upon reviews which I read	.346	-.628	.036
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Information I receive online influence my purchase decision	.665	-.274	.035

Appendix C.13 (Confirmatory) factor analysis output with 4 items deleted (oblimin)

KMO and Bartlett's Test

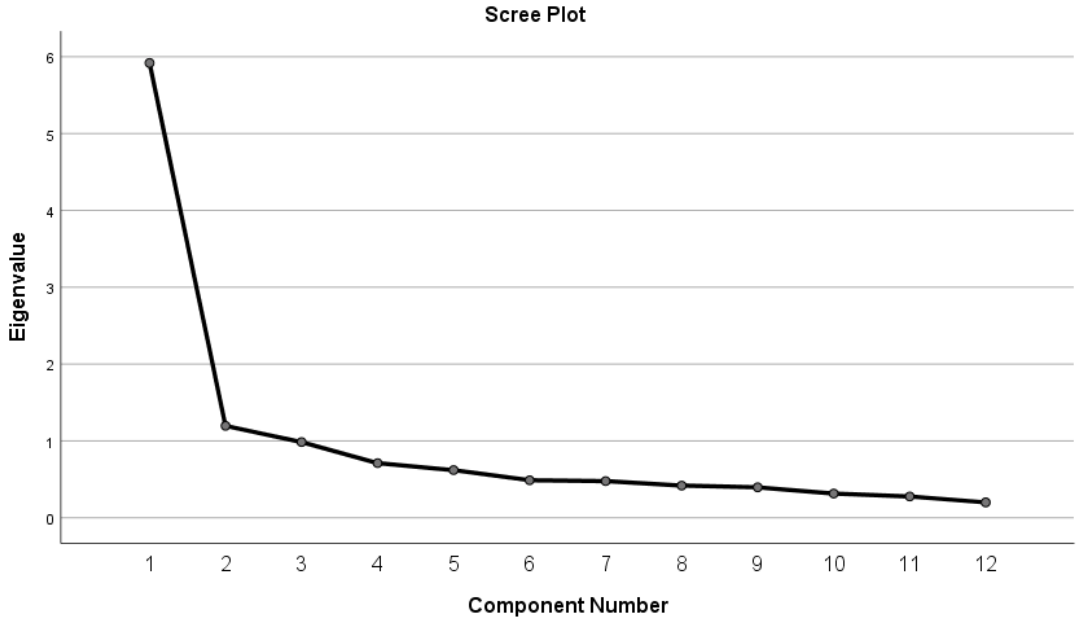
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,891
Bartlett's Test of Sphericity	Approx. Chi-Square	1058,430
	df	66
	Sig.	,000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	5,918	49,318	49,318	5,918	49,318	49,318	5,685
2	1,196	9,967	59,285	1,196	9,967	59,285	2,938
3	,985	8,205	67,490				
4	,710	5,921	73,410				
5	,620	5,165	78,575				
6	,488	4,069	82,644				
7	,477	3,971	86,615				
8	,419	3,488	90,103				
9	,396	3,298	93,401				
10	,315	2,623	96,024				
11	,277	2,310	98,335				
12	,200	1,665	100,000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.



Factor	1	2
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I have a positive opinion about the reviews obtained online	.670	.175
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be beneficial for me	.703	.191
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Overall, my attitude towards the reviews obtained online is favorable	.737	.057
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I like (the) reviews obtained online	.688	.155
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be good for me	.748	.041
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is mentioned in front of me the more it influences my purchasing decision	.087	.858
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is discussed in front of me the more it influences my purchasing decision	.091	.879
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on reviews with very high or very low ratings for the product/service	.595	.038
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on consistent reviews even positively or negatively	.780	-.114
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-(Overall product/service) rankings help me to quickly select the best choice among several alternatives	.601	.181
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision	.825	-.275
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Information I receive online influence my purchase decision	.714	.007

Appendix C.14 Robustness output (based on factor scores)

Descriptives

			Statistic	Std. Error
REGR factor score 2 for analysis 1	Mean		,0000000	,07516460
	95% Confidence Interval for Mean	Lower Bound	-,1483399	
		Upper Bound	,1483399	
	5% Trimmed Mean		,0408075	
	Median		,0631549	
	Variance		1,000	
	Std. Deviation		1,00000000	
	Minimum		-3,23559	
	Maximum		2,02850	
	Range		5,26409	
	Interquartile Range		1,33035	
	Skewness		-,688	,183
	Kurtosis		,446	,363
REGR factor score 1 for analysis 1	Mean		,0000000	,07516460
	95% Confidence Interval for Mean	Lower Bound	-,1483399	
		Upper Bound	,1483399	
	5% Trimmed Mean		,0322348	
	Median		,0553878	
	Variance		1,000	
	Std. Deviation		1,00000000	
	Minimum		-4,27837	
	Maximum		2,51196	
	Range		6,79033	
	Interquartile Range		1,21675	
	Skewness		-,638	,183
	Kurtosis		1,638	,363

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,424[a]	,180	,160	,92814017
2	,465[b]	,216	,182	,91585697

a. Predictors: (Constant), dummy_opleiding, Gender, Income, Age

b. Predictors: (Constant), dummy_opleiding, Gender, Income, Age, Regrinteractie, dummy_choicetype, REGR factor score 2 for analysis 1

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30,969	4	7,742	8,987	,000[b]
	Residual	141,277	164	,861		
	Total	172,246	168			
2	Regression	37,200	7	5,314	6,336	,000[c]
	Residual	135,046	161	,839		
	Total	172,246	168			

a. Dependent Variable: REGR factor score 1 for analysis 1

b. Predictors: (Constant), dummy_opleiding, Gender, Income, Age

c. Predictors: (Constant), dummy_opleiding, Gender, Income, Age, Regrinteractie, dummy_choicetype, REGR factor score 2 for analysis 1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,617	,322		1,917	,057
	Gender	,262	,145	,129	1,806	,073
	Age	-,025	,006	-,347	-4,146	,000
	Income	-,065	,056	-,097	-1,164	,246
	dummy_opleiding	,066	,153	,032	,432	,666
2	(Constant)	,292	,340		,859	,392
	Gender	,259	,143	,128	1,808	,073
	Age	-,021	,006	-,299	-3,532	,001
	Income	-,041	,056	-,061	-,725	,470
	dummy_opleiding	,041	,153	,019	,265	,791
	REGR factor score 2 for analysis 1	,032	,090	,032	,358	,721
	dummy_choicetype	,425	,161	,202	2,643	,009
	Regrinteractie	-,058	,148	-,035	-,389	,698

a. Dependent Variable: REGR factor score 1 for analysis 1

Volume (factor score 2_1)

Reliability Statistics

Cronbach's Alpha	N of Items
,848	2

Other concepts (factor score 1_1)

Reliability Statistics

Cronbach's Alpha	N of Items
,899	10

Appendix C.15: Cronbach's Alpha scores for the intended constructs

Attitude

Reliability Statistics

Cronbach's Alpha	N of Items
,886	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I have a positive opinion about the reviews obtained online	14,73	6,460	,709	,864
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be beneficial for me	14,68	6,049	,765	,851
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Overall, my attitude towards the reviews obtained online is favorable	14,64	6,584	,723	,861
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I like (the) reviews obtained online	14,64	6,300	,730	,859
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I think following the reviews obtained online would be good for me	14,81	6,463	,693	,868

Volume

Reliability Statistics

Cronbach's Alpha	N of Items
,723	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The number of online reviews/comments is large, inferring that the product/service is popular	10,40	4,581	,324	,775
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Highly ranking and recommendation, inferring that the product/service has good reputations	10,26	4,500	,514	,663
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is mentioned in front of me the more it influences my purchasing decision	10,71	3,718	,624	,589
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is discussed in front of me the more it influences my purchasing decision	10,63	3,904	,621	,595

Valence

Reliability Statistics

Cronbach's Alpha	N of Items
,706	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on reviews with very high or very low ratings for the product/service	7,41	1,959	,493	,655
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I rely on consistent reviews even positively or negatively	7,00	2,034	,528	,610
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-(Overall product/service) rankings help me to quickly select the best choice among several alternatives	7,15	1,937	,551	,581

Purchase Decision

Reliability Statistics

Cronbach's Alpha	N of Items
,805	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Previous reviews on the product/service affect my willingness to make a (purchase) decision	10,68	4,456	,659	,738
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision	10,58	4,790	,539	,793
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-I choose my product/service upon reviews which I read	11,06	4,240	,612	,762
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Information I receive online influence my purchase decision	10,64	4,357	,679	,727

Appendix C.16: Cronbach's Alpha scores for the intended constructs less 4 items (volume and purchase decision)

Volume

Reliability Statistics

Cronbach's Alpha	N of Items
,848	2

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is mentioned in front of me the more it influences my purchasing decision	3,37	,756	,737	.
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-The more the product/service is discussed in front of me the more it influences my purchasing decision	3,29	,854	,737	.

Purchase Decision

Reliability Statistics

Cronbach's Alpha	N of Items
,694	2

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision	3,68	,706	,531	.
The following statements are about buying a car (product) or choosing a shared car (service). Ple...-Information I receive online influence my purchase decision	3,74	,693	,531	.

Appendix D: Survey operationalization references

eWOM VOLUME:

eWOM Quantity			
The number of online review/comment is large, inferring that the product is popular.	0.873	0. 853	1.746
The quantity of online review/comment information is great, inferring that the product has good sales.	0.846		
Highly ranking and recommendation, inferring that the product has good reputations.	0.768		

EWOM volume	
The number of online review/comment is large, inferring that the hotel is popular.	(Lin et al., 2013)
Highly ranking and recommendation, inferring that the hotel has good reputations.	
The more the hotel is mentioned in front of me the more am aware of it.	(El-desouky, 2011)
The more the hotel is discussed in front of me the more it influences my purchasing decision.	

Please state your level of agreement with the following statements:

The number of online reviews/comments is large, inferring that the product/service is popular

0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

Highly ranking and recommendation, inferring that the product/service has good reputations

0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

The more the product/service is mentioned in front of me the more it influences my purchasing decision

0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

The more the product/service is discussed in front of me the more it influences my purchasing decision

0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

eWOM VALENCE:

EWOM valence	
I rely on the reviews with very high or very low ratings for the hotel.	(Yaylı and Bayram, 2012)
I rely on the consistent reviews even positively or negatively.	
(Overall product/service) rankings help me to quickly select the best accommodation among several alternatives.	

Please state your level of agreement with the following statements:

I rely on reviews with very high or very low ratings for the product/service

0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

I rely on consistent reviews even positively or negatively

0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

(Overall product/service) rankings help me to quickly select the best choice among several alternatives

0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

ATTITUDE TOWARDS eWOM:

Attitude towards eWOM		
1	I have a positive opinion about the advices/information obtained on social media	0.870
2	I think following the advices/information obtained on social media would be beneficial for me	0.868
3	Overall my attitude towards the advices/information obtained on social media is favourable	0.848
4	I like the advices/information obtained on social media	0.836
5	I think following the advices/information obtained on social media would be good for me	0.818

Please state your level of agreement with the following statements:

I have a positive opinion about the reviews obtained online
0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

I think following the reviews obtained online would be beneficial for me
0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

Overall my attitude towards the reviews obtained online is favourable
0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

I like the reviews obtained online
0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

I think following the reviews obtained online would be good for me
0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

PURCHASE DECISION:

Customer purchasing decision	
Previous reviews on the hotel affect my willingness to make a reservation.	(Wu, 2013)
When I believe the hotel offers the same good (bad) service as the reviews described, I am (not) willing to make a reservation.	
I choose my hotel accommodation upon reviews which I read.	Original scale
information I receive online influence my purchase decision of hotel services.	(Yaylı and Bayram, 2012)

Please state your level of agreement with the following statements:

Previous reviews on the product/service affect my willingness to make a (purchase) decision

0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

When I believe the product/service offers the same good (bad) service as the reviews described, I am (not) willing to make a decision

0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

I choose my product/service upon reviews which I read

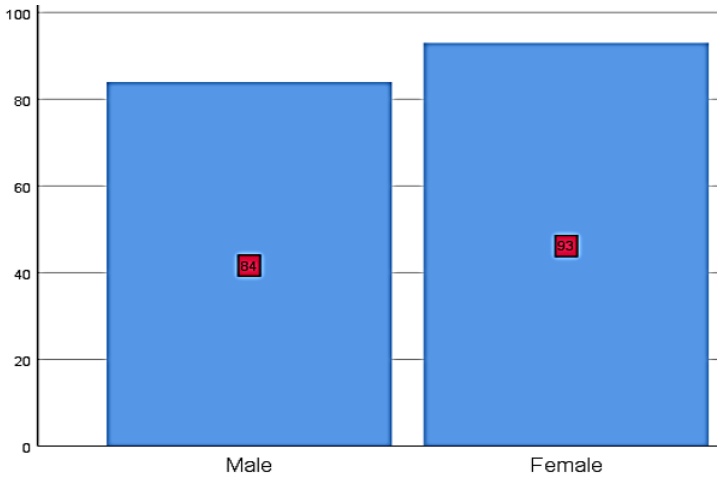
0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

Information I receive online influence my purchase decision

0----------0----------0----------0----------0
(1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree)

Appendix E: Additional data

E.1: Distribution of gender



E.2: Regression output before mean centering (High VIF values)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	3,976	,138		28,856	,000		
	dummy_geslacht	-,123	,128	-,074	-,960	,339	,966	1,036
	dummy_leeftijd	-,296	,145	-,170	-2,033	,044	,817	1,224
	dummy_inkomen	-,193	,138	-,116	-1,400	,163	,834	1,198
	dummy_opleiding	,055	,134	,032	,406	,686	,935	1,070
2	(Constant)	-,716	1,037		-,690	,491		
	dummy_geslacht	-,017	,109	-,010	-,158	,875	,910	1,098
	dummy_leeftijd	-,047	,125	-,027	-,375	,708	,752	1,330
	dummy_inkomen	-,031	,120	-,019	-,261	,795	,751	1,331
	dummy_opleiding	,002	,113	,001	,019	,985	,897	1,114
	VALENTIE	1,049	,283	,841	3,712	,000	,076	13,167
	VOLUME	-,265	,217	-,268	-1,224	,223	,081	12,288
	ATTITUDE	,384	,120	,290	3,209	,002	,478	2,094
	KEUZE	1,361	,729	,786	1,867	,064	,022	45,465
	Interactie_KEUZE_VALENTIE	-,427	,199	-1,143	-2,150	,033	,014	72,482
	Interactie_KEUZE_VOLUME	,106	,148	,274	,716	,475	,027	37,661

a. Dependent Variable: PURCH_DEC