"How Online Reviews are Read"
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Abstract

Online reviews, a form of electronic word-of-mouth (eWOM) communication, have fast become a relied on source of information. It is for this reason we need to further understand how it is consumers read this information; what is important to them and what personal or individual characteristics influence how they read. To do this, a mixed method approach was taken using 30 participants. First, an eye-tracking experiment was conducted with participants reading an online review website. Following this, an online questionnaire was conducted to measure the individual characteristics of the reader. Both sets of data were analysed separately, using coding and SPSS frequencies respectively. Both sets of data were then combined and analysed on SPSS using linear stepwise regression and logistic stepwise regression. Results show that specific review factors do work together and gazes and actual liking of online reviews does interplay somewhat. Most significantly, certain personal characteristics and traits do influence the way in which online reviews are read.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of another degree or diploma of a university or other institution of higher learning.

Signed:	 	

Maree Lockie

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Ethics Approval

AUT Ethics committee approved this research on 17 June, 2014. Ethics application: 14/99 How online reviews are read. Full approval can be seen in Appendix 7.

1. Introduction

1.1 Introduction and Background to the Research

In the scheme of marketing literature, research specifically focussing on online reviews and online review factors is relatively new and small. Despite this, the use of online reviews by consumers is extensive with numerous well-known, well-respected and well-used websites dedicated to online consumer reviews. Many of these websites focus on a single industry, such as TripAdvisor which focusses on travel related reviews; whilst others are a little broader, Yelp! for example focusses on services. Some review websites are international; like both TripAdvisor and Yelp!, whilst others are more locally focussed; such as New Zealand's own Beauty Review. Dedicated review websites are increasing in their popularity, likewise are retail websites with their own in-built review capabilities.

In today's internet-based world, access to information is becoming easier and easier. More consumers are researching products and services prior to purchasing (BrightLocal, 2013) and as such the likes of online reviews are becoming more important to both businesses and consumers alike. Research from BrightLocal in 2014, a search engine optimisation company, has shown that 88 percent of consumers read online reviews for local business; an increase from 85 percent in 2013 and 76 percent in 2012 (BrightLocal, 2013, 2014). This showing there is a notable upwards trend of the use of online reviews in the past three years.

In the past year alone there have been numerous articles appear on online news websites discussing online reviews including that of services; including clauses in their contracts where as customers cannot write negative reviews without financial penalties. Two hotels in particular have come under scrutiny for doing just this; receiving significant public backlash. One example of such is the Broadway Hotel in England. After writing a negative review about the hotel, the hotel guests who wrote the review received a charge on their credit card for 100 Great British Pounds (Wilkinson, 2014). In response, the hotel guests were told that it was the hotels policy to charge guests who write negative reviews (Wilkinson, 2014).

Likewise, a similar situation occurred in the United States at the Union Street Guest House. They too specifically state in their policy that anyone to write a negative review, including anyone as a part of a party, be that for a wedding or other event, will be fined 500 US dollars (Lu, 2014). Interestingly, in response to the Washington Post article highlighting a case where a hotel guest was charged and receiving much public backlash, the Union Street Guest House removed the clause from their policies. Their explanation for the clause was simply that it was not enforced; rather it was supposed to have been removed years ago (Lu, 2014).

As highlighted by these recent incidents, it is apparent that not only are consumers taking online reviews seriously, but businesses are seeing and acknowledging the fact that online reviews can greatly benefit a business; or they can severely harm a business. In other words, businesses are now accepting the significant impact online reviews have on consumers and

their purchase decisions. It is because of this that online reviews are becoming a more discussed topic and an area of marketing which is in need of further research. This thesis taps into personal characteristics and online reviews in order to further this relatively small area of research.

1.2 Justification for Research in the Area of Online Reviews

This research can be justified from both a consumer and marketer perspective. The increasing use of the internet as a research tool for consumers during the purchase decision process shows there is an increasing need for more research in this area. By understanding what it is that consumers do during this information search, other reviewers and businesses (or online review websites) alike can help give this information in a clearer and more understandable way. This research also benefits marketers and researchers in that it helps to fulfil the current gap in literature surrounding this topic as well as providing more insight into online marketing and electronic word-of-mouth.

The internet has enabled consumers to create and gather product information from peer consumers (Hennig-Thurau, Gwinner, Walsh, & Gremler, 2004) in a way that expands on the limitations of traditional WOM; that of expanding their peer circle for recommendations. In addition to the abilities of traditional WOM, eWOM has the ability to diffuse information at an unparalleled speed as well as permitting the use of multidirectional information exchanges (C. M. K. Cheung & Thadani, 2012).

This being said, consumers do indeed do prior online research before purchasing. It is suggested that 62 percent of shoppers already know what they want to buy before even entering a store. Of these shoppers, 84 percent are influenced by consumer-written online content (Bazaar Voice, 2013); or eWOM. GE Capital Bank actually suggests this figure could be higher; suggesting that 81 percent of consumers researched online before visiting a store for purchases of a larger value (over US\$500). They also suggest that consumers spend a significant amount of time researching these purchases; 79 days to be exact (Adams, 2014).

Online reviews provide a source of supposedly-trusted information to consumers; they provide a source of word-of-mouth (WOM) in an online context. Interestingly, in BrightLocal's recent 2014 Local Consumer Review survey, it was found that 88 percent of consumers trust online reviews just as they do personal recommendations (i.e. WOM); a substantial increase from 79 percent in 2013 and 72 percent in 2012 (BrightLocal, 2013, 2014). What is notable is a decrease in the number of consumers not trusting online reviews as they do personal recommendations; 2011 saw 33 percent of consumers not trusting online reviews as they do personal recommendations and this dropped to only 13 percent by 2014 (BrightLocal, 2013, 2014). This suggests that online reviews are becoming a more accepted and trusted source of information as we continue into the digital age.

Although there is significant trust in online reviews and the reviewers who place them, there are still some reviewers who place false reviews. Some may be paid to write positive reviews for a business, whilst some reviewers may be employees of the business. Despite this, online review readers are aware and do look for authenticity in online reviews. Consumers are concerned with online review authenticity and need to feel it is a genuine review before they trust what is being said (BrightLocal, 2013).

Whilst the use of WOM to those who consumers know personally increased on social media between 2012 and 2013, by 2014 the use of social media as a platform for recommendations appears to have plateaued. However, it is apparent that traditional WOM itself has decreased; 78 percent engaging in WOM practices amongst those they know in 2012, down to 72 percent in 2013 and further dropping to 61 percent in 2014 (BrightLocal, 2013, 2014). Despite this, traditional WOM is still largely popular; it just appears that we may be seeing a slow decline in the use of traditional WOM leading to an increase of online or electronic WOM (i.e. eWOM).

1.3 Research Problems – Justification and Contributions

The aim of this thesis is to fill a gap in current marketing literature. As is apparent when looking at the current body of online review specific research, it is both limited (in general) and lacking in the area of online review reading behaviour. This area also mainly consists of research targeting specific aspects of online reviews; such as review helpfulness, source credibility or review valence. What is lacking is an overview of online reviews as a whole, or how the differing aspects of online review websites interact and work (or not work) together. This study fulfils this gap. It looks at how the different aspects of online reviews (and online review websites) work together and identifies patterns of how consumers process online reviews. It helps to identify not only how people read online review websites, but how these differences in website use can be explained. This is beneficial to both consumers and businesses alike; consumers understand how it is they use online reviews whilst business can better tailor their suits to meet consumers' needs.

What is key in justifying this research stands behind the fact that this area of marketing research is both under researched and highly used by consumers. Consumers are using online reviews as a source of information when making a purchase decision and this is only increasing. Notably, consumers are becoming more rational when they are purchasing and doing product research and comparisons online is far quicker than doing so in stores (Adams, 2014). This is especially apparent amongst younger consumers who are more technologically savvy. Just as this area of research is important for consumers it is important for both academics and marketers alike. There is an obvious gap in marketing literature surrounding this topic, in particular for experimental research looking at a range of online review characteristics. This study fills all of these gaps, meeting both consumer and marketer needs. The research questions developed to guide this study are of importance to this area of research. This is because they take into account how the differing online review factors interact and work

together; currently, research in this area is mainly focussed on single factors. This study also takes into account the individual characteristics of the reader. Past online review research largely centres around the study of single review characteristics or factors individually and no one has taken into account the idea that the reader of the reviews, and their reading behaviour, may in fact moderate the findings. In other words, it is with the understanding the people read in differing ways that this study is based. Because of this, it is able to identify online review reading patterns and behaviours. Most importantly, by looking at both the review as a whole and at reader characteristics, it is able to be found reasons as to why certain areas of online reviews are read more or seen as more important.

As developed from the current need for in-depth online review research, three research problems have been selected. These are:

RQ 1. How do the different online review factors work together?

This question looks at where people are initially looking and the importance of online review characteristics. These review characteristics include photos, individual review source (the reviewer), individual review star ratings, summary statistics and 'Also In The Area' alternative service suggestions. It investigates how all the differing review content and review website characteristics interplay with one another.

RQ 2. How does the liking of reviews and actual gazing compare?

This looks into whether what people are identifying as liking and disliking coincides with where they are gazing. The eye-tracking study and its coding reveals where it is participants are gazing at; the coding includes which reviews participants read. This will be analysed alongside which reviews participants identify in the questionnaire as liking and disliking and which online review factors participants identify as being important to them.

RQ 3. How do individual characteristics affect reading & the influence of reviews?

This looks at the personality and individual characteristics questionnaire and how this relates to peoples gaze behaviour. This will see analysis undertaken on the eye-tracking coded behaviour; both straight coding data (yes and no data a to whether they engaged in a particular reading behaviour) and calculated coded data (calculated from the gaze plot data as a percentage of a participants gazes which were in a certain area of the screen dedicated to an online review factor as a percentage of their total gazes). This research question will reveal whether the personal characteristics of a reader impacts how they read an online review website; which characteristics relate to reading certain areas of the online review website or how they read the website.

1.4 Contributions

In answering these research questions, there will be a significant contribution to marketing literature; specifically that surrounding online marketing. As well as contributing research to an area with in-depth experimental research is limited, this research will also enable marketers to better design online review templates on their websites. This research reveals what it is people actually look at; what is more important to consumers when reading online reviews.

This in turn benefits both consumers and businesses alike. Consumers get the information that they are actually looking; better templates provide a clearer and simpler way for the information that consumers are searching for to be presented without them actually having to search for it. Consumers are using the internet for product research prior to purchasing more now than they have in the past and as such it is an important avenue for research. The easier information is presented to consumers, the easier purchase decisions may become and the less time they have to spend on unnecessary research.

Business too will benefit from this research. Online reviews have the ability to significantly benefit or harm a business. As such understanding better is necessary to know how to use them to your benefit. Businesses who understand how to create online review templates which guide reviewers to write useful information desired by readers will see more effective online reviews. More effective reviews could create quicker purchase decisions and consumers who may fit better with the business; possibly creating better customer relationships.

Overall, due to the lack of online review research which largely centres around the study of specific single review factors, this study significantly contributes to the current small stream of online review specific literature within the marketing field. What the current research lacks is the idea that the actual reading behaviour itself might moderate findings; something of which may have occurred in past online review studies unknown to the researcher. Online reviews are an increasing source of information for consumers and, as such, understanding them can help to further understand consumers and what information they want when making a purchase decision. This can then lead to the creation of better online review templates and/or websites to provide a better consumer experience and increased purchases.

1.5 Method

This study uses a mixed method and inductive approach in the same study. It starts with a qualitative experiment using the Grinbath eye-tracker. This involved fitting participants with an eye-tracking camera whilst they read a fictitious online review website, followed by a decoy blog website. This decoy was integrated so as participants were focused on online reviews solely so as to create the most realistic situation for participants.

Immediately following the eye-tracking experiment, participants completed an online questionnaire. This survey involved measures of differing personality and individual

characteristics. This was implemented as an online survey through Qualtrics for ease of implementation and analysis as the survey also could include clear pictures of the prior viewed website. At the conclusion of the survey, participants were given a gift voucher for their time and all data was saved under an identification number chosen by the participant. Once data collection was completed, the eye-tracking data was coded for themes and the gaze data was exported and turned into graphs which represent gazes on the computer screen. The questionnaire data was downloaded to SPPS and analysed using ANOVA, clusters and classification trees.

Eye-tracking is an appropriate tool to use in this study as it gives accurate insight into how it is people read online reviews. Oftentimes, people are not fully aware of all that they read or do; the likes of an eye-tracker gives insight into even the subconscious gazes rather than relying on the likes of a survey which only shows what people can identify as reading. Eye-tracking as a research tool has grown in recent times, potentially due to the technological innovations made in eye-tracker technology and the decline in cost of these devices (Wedel & Pieters, 2008). The advances in eye-tracking technology has seen them become less time consuming to use, less awkward to use on participants, and less expensive to both buy and use (Wedel & Pieters, 2008). This makes an instrument such as this perfect for research where a natural environment is desired as the eye-tracker is not intrusive in any way or form, allowing for participants to read the online review website as they would at home. The questionnaire provides additional information to support the eye-tracking findings; explaining differences in reading patterns. The questionnaire gives support where the qualitative eye-tracking experiment is limited; in explaining why differences in reading occur. Thus, using the mixed method approach allows for any weaknesses in one aspect of the study to be support by the other aspect.

1.6 Outline of the Report

This report includes the following sections: a thorough literature review and discussion, a detailed methodology, a discussion of results and a conclusion incorporating all aspects of the study. The literature review chapter focuses on three key areas of current marketing research: electronic word-of-mouth as an extension to traditional word-of-mouth; online review specific research; and finally research into how people read with a specific focus on online and computer-based reading. Each of these key topics is discussed at depth in relation to online reviews and online marketing.

A chapter discussing the methodology follows. This section delves into the mixed methodology chosen for this research; how it was implemented and why. The development of the online review and blog websites used in the eye-tracking experiment is discussed, along with the procedure detailing how the eye-tracking and questionnaire were implemented.

Following this section, the analysis of the data collected is discussed. This section highlights the eye-tracking data; its coding and analysis. It also highlights the questionnaire data and its

statistical analysis on SPSS. Finally it discusses the final results that are apparent after the two sets of data are combined.

Lastly, the conclusion chapter discusses the study as a whole. This section highlights the key literature discussed, the methodology and the results found; linking them together to answer the research questions.

2. Literature Review

Research with a focus on online reviews is relatively new and small within the depth of marketing literature. The topic of online reviews branches off of a slightly larger topic, that of electronic word-of-mouth (eWOM) which itself branches off from the broader topic of word-of-mouth (WOM) communication. I have therefore come to the topic of online reviews as an evolution of other popular streams of marketing literature. As our use of electronics has risen, so has the amount of research based in this electronic environment.

Online reviews are an aspect of eWOM which itself can be viewed as an extension of WOM communication literature (Hennig-Thurau et al., 2004). WOM communication has expanded into eWOM communication with the popularity of online communication. As such, where offline WOM cannot fulfil the needs of a person's information search, eWOM, and in this case online reviews in particular, become a platform for which traditional WOM can be extended. With offline WOM being an important and trusted source of information (Dichter, 1966), eWOM becomes an important form of electronic communication.

This literature looks to summarise key pieces of this related literature surrounding the topics of eWOM as an extension of WOM communication, online review based literature, and research surrounding how it is people read. These areas of research are important in forming a base for this study because combined, they reflect the essence of online reviews. The eWOM section explains the importance of online reviews to consumers; why they are trust and why they provide sought after information. The online review section highlights research already conducted in the area and focusses largely on the specific online review factors and what makes the useful or helpful to readers. The section of how people read, with a focus on screen-based or online reading, provides the basic understanding of reading behaviours and what could be expected in reading online reviews. This review of literature forms the basis of the research questions and methodology of this thesis.

2.1 Definitions, Boundaries and Key Assumptions

Before furthering discussion on the key literature surrounding the ideas of WOM and eWOM, it is essential that a definition of both terms is established for how they are understood in the context of this thesis. This helps to establish boundaries as to how this review of literature has been interpreted and to what extent research has been undertaken.

Word-of-mouth (WOM) communication, for the purpose of this research, is defined as non-marketer generated two-way communications about an experience with a product or service (Arndt, 1967; Harrison-Walker, 2001; Richins, 1983). WOM communication involves interaction (two-way communication) and is the most influential source of information (Day, 1971; Engel, Blackwell, & Kegerreis, 1969; Richins, 1983). Dichter (1966) is a key researcher in the area with

much of the WOM discussion below based on his work; this is then inferred and extended onto eWOM.

Electronic word-of-mouth (eWOM) communication is also a channel of interpersonal influence (Grewal, Cline, & Davies, 2003), however this influence is through online communication tools such as emails, discussion boards, blogs or review websites (Okazaki, 2009). With the increasing popularity of the internet and online communications, there is seen to be a need to reassess WOM literature (Breazeale, 2009). In accordance with this, eWOM is seen by marketers to be an important extension of WOM literature (Cheong & Morrison, 2008; Hennig-Thurau et al., 2004; Panteli, 2009). It is for this reason that this thesis is based on the idea of eWOM being an extension of WOM.

Viewing eWOM as an extension of WOM, it is apparent there are many similarities as well as differences. Much literature views the only difference between WOM and eWOM as being the use of electronic devices to communicate (Hennig-Thurau et al., 2004; Hung & Yiyan Li, 2007). Both WOM and eWOM are a source of information sought after near or during purchase decision (Barton, 2006). Like WOM, eWOM also involves the discussion of price, effectiveness, problems encountered and usage experience (Coovert & Burke, 2009).

Not only does eWOM differ from traditional WOM due to its electronic device use, but it goes further than the two-way communicative nature of WOM (Gilly, Graham, Wolfinbarger, & Yale, 1998). eWOM extends on WOM by increasing the number of available communication channels and, in turn, being able to reach many more recipients. eWOM is able to save on time and information search cost for consumers (Hung & Yiyan Li, 2007). As eWOM is permanent and easily accessible, it allows consumers from across the globe to communicate with ease (Gelb & Sundaram, 2002).

eWOM is an important and influential communication tool due to its longevity and its broader reach of influence than face to face communications as is used in traditional WOM (Breazeale, 2009; Graham & Havlena, 2007; Lyons & Henderson, 2005). There are two variations of eWOM: marketer generated and consumer generated. Marketer generated eWOM sees brand communities created and observed through the business websites along with the use of viral marketing (Hennig-Thurau et al., 2004; Kozinets, Valck, Wojnicki, & Wilner, 2010; Muniz & O'Guinn, 2001; Park & Lee, 2009b; Vilpponen, Winter, & Sunqvist, 2006). This thesis focusses on the user (consumer) generated aspect of eWOM.

Consumer or user generated eWOM focusses on virtual communities, discussion boards, online reviews and blogs (Bagozzi & Dholakia, 2002; Cheong & Morrison, 2008; Dholakia, Bagozzi, & Pearo, 2004; Zhu & Zhang, 2010). Along with the types of user-generated eWOM, the types of information these eWOM sources give has been investigated often: for example information type (Cheong & Morrison, 2008; Zhu & Zhang, 2010), sales prediction and purchase intention (P. Y. Chen, Wu, & Yoon, 2004; Chevalier & Mayzlin, 2006; Dellarocas, Zhang, & Awad, 2007; Duan, Gu, & Whinston, 2008), information credibility (Bronner & de Hoog, 2010; C. M. K. Cheung & Thadani, 2012) and motivations for use (Bailey, 2005).

User (consumer) generated eWOM is far more effective than marketer generated eWOM (Bickart & Schindler, 2001). However, user generated eWOM in regards to forums, online reviews and blogs, has had its credibility questioned due to the ability of the author to be anonymous (M. Y. Cheung, Luo, Sia, & Chen, 2009; Schindler & Bickart, 2005). It cannot be determined as to whether these so called consumers are in fact consumers; there is potential for these consumers to have been paid by marketers (Breazeale, 2009; Werde, 2003) or are simply marketers themselves. This could turn this apparent user generated content into marketer generated content; whether the reader is aware of this or not.

WOM is rather limited when compared to eWOM and fails to take into account our increasingly electronic world. Electronic WOM can be seen as an extension of WOM that takes into account the ease of communication that electronic devices and the internet brings; however, it is not without its cons. The key characteristic of WOM – and what makes it truly effective – is that it is a two-way communication between those who already know each other. This is not the case with eWOM; you cannot be certain as to who is providing the information. Credibility is key to WOM and this leads to recommendations and opinions of which are highly influential (Brooks, 1957). It is essential here that eWOM is established as an extension of traditional WOM; it is with this understanding that the literature discussed further is interpreted.

2.2 Electronic Word-of-Mouth (Viewed as an Extension of Word-of-Mouth)

As we enter the digital age, many aspects of our previously offline world have become digitised: books, newspapers, television and movies just to name a few. The digital world has not only crossed over into the physical aspects of our lives, but our actions and behaviours too. We now more often than not ask for directions and instructions from a computer, we tend to communicate more electronically than in-person and likewise, we seek advice for the likes of product or service recommendations online just as we would, normally, in the offline world. As was said in 'Supercharging Word of Mouth':

"The online and mobile technologies that make social media possible have strengthened the power of word of mouth – a key influencer in the decision-making process" (Windsor, 2012)

WOM as we traditionally know is in some ways "supercharged" by the increased use of the internet and has created eWOM as an extension.

The online and offline worlds influence one another whereby the online world can be a proxy for the offline world (and vice versa): online information is a basis for offline decisions (Godes & Mayzlin, 2004), likewise offline experience can be a basis for online discussion. Likewise, the importance of eWOM is seen in the belief by individuals that the website itself is a primary actor in their online social networks (Brown, Broderick, & Lee, 2007). Brown et al. (2007) even

suggest that online communities can be a social representation for individual identification. As such we see this crossover effect between the offline and online worlds of word-of-mouth.

eWOM is only gaining in importance to consumers, so much so that online consumer reviews can serve as a new element within the marketing communication mix (Y. Chen & Xie, 2008). Chen and Xie (2008) suggest that online consumer reviews are a form of free 'sales assistants'. These electronic 'sales assistants' or consumer reviews help people to choose the product or service that best suits their unique usage needs (Y. Chen & Xie, 2008). This has the potential to work for both positive and negative reviews in that positive reviews act as a sales assistant selling their product whilst negative guide the consumer to another product.

There is general consensus amongst researchers that the impact of eWOM is the most researched topic within current eWOM literature (Cantallops & Salvi, 2014; Cheng & Zhou, 2010; C. M. K. Cheung & Thadani, 2012). Cantallops and Salvi (2014) suggest that the other main line of research is that of review-generating factors or the reasons as to why people write online reviews. Essentially, it has been found that the causes and effects of eWOM are two of the main lines of eWOM research. The individual (this incorporates the information source and the source credibility) and the message (the actual content and the receiver of the content) are also key focusses for eWOM analysis (C. M. K. Cheung & Thadani, 2012).

eWOM literature generally shares similarities with traditional WOM research (Cheng & Zhou, 2010). What studies have been done surrounding the actual content of eWOM have quite specific focusses; Daugherty and Hoffman's (2014) study involving attention for example who used eye-tracking as their measurement tool to measure consumer attention over a diverse range of consumer-generated eWOM product pages. Through this eye-tracking study it was found that strong attentional differences are apparent in regards to both the eWOM message and the brand type (Daugherty & Hoffman, 2014).

Literature on eWOM in general sees a trend in research based on the causes and effects of eWOM and at times often specific to online reviews or social media. Key WOM and eWOM research findings, including research into the antecedents and effects of WOM, can be seen in Table 1 and are discussed in further depth below. This area of literature speaks largely to the first research questions and helps in understanding key specific online review factors. It identifies which review factors have already been acknowledged to having influence on a reader and suggest key characteristics to input into the online review website developed for the eye-tracking study.

Table 1: Key WOM and eWOM Literature

Author and Publication Year	Study	Key Findings
Cantallops & Salvi (2014)	Literature review of electronic word-of-mouth (eWOM) articles published in the last five years with a focus on the travel or hotel industry.	Two main lines of research: review-generating factors (causes of writing) and impacts of eWOM (effects or impacts caused by online reviews).
Cheung & Thadani (2012)	Systematic literature review of eWOM research	eWOM communication is able to diffuse at an unprecedented speed and allows for multidirectional exchanges of information. The contextual factor, or the platform, is suggested to be one of the most essential factors which could impact on eWOM adoption in the future. In reviewing eWOM literature, it was found that the four most research response variables are: attitude, purchase intention, purchase and eWOM adoption. It is also suggested that purchase intention is positively associated with purchase, eWOM credibility positively associated with eWOM adoption and source credibility also positively associated with eWOM associated with eWOM credibility.
Chevalier & Mayzlin (2006)	Effect of consumer reviews on relative sales of books at Amazon.com and bn.com.	Both Amazon.com and bn.com saw overwhelmingly positive reviews, however there were more and longer reviews at Amazon.com. Improvement in reviews leads to an improvement in relative sales at that website. The impact of one-star reviews is greater than that of five-star reviews. Customers do not rely solely on summary statistics; customers read the actual review text.
Daugherty & Hoffman (2014)	Experimental design: within-subject 3x2 factorial design Eye-tracking used to measure consumer attention across eWOM.	Strong attentional differences are apparent because of eWOM message valence and brand type. Luxury level has an influence on the time spent by consumers evaluating consumer-generated eWOM. There is an interaction between eWOM messages and brand classifications which influences attention.
Dichter (1966)	Depth interviews	People will only talk about a product/service if they get something in return; satisfaction. Motivations of the speaker for WOM include product-involvement (product experience is strongly felt, gratifying or ungratifying), self-involvement (need for self-confirmation and reassurance in front of peers) and other-involvement (need or intent to help others).
Godes & Mayzlin (2004)	Content analysis of Usenet word-of-mouth (WOM) communication about television shows. This was compared with Nielsen ratings for those television shows.	Online conversations are an easy, efficient and cost- effective measure of WOM. Dispersion is a critical component of WOM to measure. A measure of conversation dispersion across communities holds explanatory power in regards to TV ratings. Findings suggest that people make offline decisions based on online information; online conversations could be a proxy for offline ones.

Goldsmith & Horowitz (2006)	Qualitative data gathered through Critical Incident Technique. Quantitative data through questionnaire which measure customer motivations to seek opinions online.	Motivations to seek opinions online include: risk reduction, because others seek opinions online, find lower prices, easy access to information, accidental or unplanned online opinion seeking, because it is cool, motivated to by offline inputs, and for prepurchase information. Some factors are more deliberate; such as risk reduction, whilst others are more spontaneous; such as accidental or unplanned online opinion seeking. It was also found that people find other consumers' information more important than that of advertising.
Hennig-Thurau, Gwinner, Walsh & Gremler (2004)	Online questionnaire	Triggers for eWOM behaviour include: a desire for social interaction, a desire for economic incentives, concern for others and enhancing their own self-worth.
Lee, Rodgers & Kim (2009)	Experiment with a one factor between subjects design with a control group	Despite extremely positive reviews increasing attitude toward the brand, even a moderate amount of negativity cancelled out this effect. Extremely negative reviews had a stronger influence of brand attitude than moderately negative or extremely positive reviews. This supports a negativity effect and an extremity effect.
Sun, Youn, Wu & Kuntaraporn (2006)	Survey looking at online opinion seeking and online opinion leadership.	Significant predictors of online WOM include an innovative personality, ability to use different internet tools and a strong internet social connection or network. Behavioural consequences of online WOM include online forwarding and online chatting or discussion.
Sundaram, Mitra & Webster (1998)	Critical Incident Technique	Motivations to engage in positive WOM include altruistic, product involvement and self-enhancement reasons. This includes satisfaction in the product performance and the contact between the consumer and the employee. Motivations to engage in negative WOM include altruistic, anxiety reduction, vengeance and advice seeking reasons. This includes inadequate responses to issues with the product and poor value perceptions by the consumer during their post-purchase evaluation. There is a significant relationship between motives to engage in WOM and consumption experience.

2.2.1 Antecedents of Electronic Word-of-Mouth

As stated prior, the antecedents are one of the largest researched areas of WOM (Cantallops & Salvi, 2014). Table 1 includes key research into the antecedents to WOM (which are inferred onto eWOM by extension) and eWOM. Discussed below are antecedents to both seeking and giving eWOM as an extension on WOM.

In regards to seeking eWOM, people do so in order to either provide options for consideration when in trying to make a purchase decision or to support their already made purchase decisions. eWOM in particular can help with providing general product or service information (including price comparisons), highlight the negative aspects of a product or service and can help identify any trends (Goldsmith & Horowitz, 2006; Schindler & Bickart, 2005). It can be a

social outlet for many and enable people to follow other consumers (Goldsmith & Horowitz, 2006; Schindler & Bickart, 2005). Most importantly, eWOM provides both pre- and post-purchase decision support to consumers; helping them make the most suitable purchase for their needs or justifying a good (or sometimes bad) purchase decision (Goldsmith & Horowitz, 2006; Schindler & Bickart, 2005).

In regards to writing or contributing to WOM and eWOM, antecedents include incentives (both gratification and revenge), concern for others, bettering the self, product involvement and interaction. To start, an antecedent to participating in eWOM communication includes that of incentives; both economic and psychological incentives. The person talking about their experiences with a product or service, or the 'communicator', may be motivated to share their experiences due to the potential incentives they themselves could gain (Dichter, 1966; Hennig-Thurau et al., 2004). These may be economic incentives such as reparation for an unsatisfactory product or service (Hennig-Thurau et al., 2004), or they may be psychological incentives in the form of gratification (Dichter, 1966).

Psychological incentives or, as Dichter (1966) suggests, gratification represents the good feeling one receives from talking about a positive experience. Similarly, this sense of gratification could also be gained from exposing a bad experience with a product or service; vengeance in the form of negative WOM or eWOM (Sundaram, Mitra, & Webster, 1998). Those who use vengeance as a motivation to partake in WOM tend to explicitly advise readers not to use that specific company, product or service (Sundaram et al., 1998).

Dichter (1966) also suggests that people will not do things for nothing; the same goes for eWOM. People will not compliment or expose products or services for no reason. This idea coincides with Dichter's (1966) suggestions of the need for psychological incentives in order to participate in WOM behaviour. This idea of personal gain or bettering the self includes, along with incentives, enhancing one's own self-worth along as well as that of self-involvement (Dichter, 1966; Hennig-Thurau et al., 2004; Sundaram et al., 1998).

Another reason for people to initiate and engage in eWOM is due to their concern for other consumers. This could be the communicator being concerned for others having the same experience with a specific product or service or it may be more general in that the speaker has altruistic characteristics to their personality (Hennig-Thurau et al., 2004; Sundaram et al., 1998). Altruism is an interesting motivation for WOM with it eliciting engagement in both positive and negative WOM (Sundaram et al., 1998); overall it is the motivation to share your experience so as others can learn from it.

The product or service itself can motivate people to engage in WOM communication. This is often referred to as product-involvement motivations (Dichter, 1966; Sundaram et al., 1998). Especially in reference to higher cost items, people want information provided from an independent source of whom has no material gain from sharing their experience (Dichter, 1966). Satisfaction with the performance of a product can lead to positive WOM which tends to focus on the superiority of the product's performance and/or it's unique benefits. Dissatisfaction

with the performance leads to negative WOM to help the receiver learn from their experience as well as enabling them to seek vengeance (Sundaram et al., 1998).

Motivations for people to engage in WOM behaviour is significantly related to their consumption experiences and value perceptions (Sundaram et al., 1998). Sundaram et al. (1998) found that 60% of positive WOM is related to product performance satisfaction and employee-consumer contact experiences. Value perceptions which tend to trigger positive WOM are those where the product is perceived as lower price, good value for money and/or bought at a greatly reduced price (through a sale or coupon for example) (Sundaram et al., 1998). In contrast, 58% of negative WOM can be attributed to problems encountered in using the product or service and inadequate post-purchase value perception evaluation (Sundaram et al., 1998). Negative WOM tends to be triggered by those products perceived as too expensive or poor value for money (Sundaram et al., 1998).

How a company responds to any issues are also a trigger for eWOM communication. Where a company rectifies an issue a customer has, such as exchanging a faulty product or refunding money, positive WOM tends to develop. However, if the company delays their response, does not honour warranties, does not exchange or refund products, or they blame the customers, negative WOM tends to result (Sundaram et al., 1998). This suggests that there tends to be sufficient reasoning behind both negative and positive WOM; if a company does not fulfil their side of the deal, people retaliate through negative WOM. If a company exceeds expectations, or at the very minimum meets their obligations satisfactorily, positive WOM is triggered.

Lastly, interaction is another important motivation for both WOM (Dichter, 1966; Sundaram et al., 1998) and eWOM communication (Hennig-Thurau et al., 2004). A desire for social interaction is a key trigger for eWOM participation (Hennig-Thurau et al., 2004), along with how involved people are in the message and their desire to seek, and in contrast give, advice (Dichter, 1966; Sundaram et al., 1998).

These findings all set the scene as to why a consumer would read or write an online review. Depending on their motivation to engage in eWOM, the type information they are searching for may differ; likewise their personal characteristics may reflect why and what it is they are searching for.

2.2.2 Consequences of Electronic Word-of-Mouth

Like the antecedents, the consequences of WOM and eWOM have been the focus of much online communication literature. For eWOM particularly, there is a significant amount of research surrounding the impacts of consequences of engaging in this form of communication.

Like WOM, eWOM can have a significant impact on purchase intention and sales (P. Y. Chen et al., 2004; C. M. K. Cheung & Thadani, 2012; Chevalier & Mayzlin, 2006; Duan et al., 2008; Sun, Youn, Wu, & Kuntaraporn, 2006). Cheung and Thadani (2012) suggest that purchase intention resulting from eWOM is one of the largest researched domains of eWOM. Purchase intention

has been consistently found to have a positive association with eWOM (P. Y. Chen et al., 2004; C. M. K. Cheung & Thadani, 2012; Chevalier & Mayzlin, 2006; Duan et al., 2008; Sun et al., 2006). The volume of eWOM is also positively related to purchase intention (C. M. K. Cheung & Thadani, 2012), illustrating the importance of both eWOM content and number of postings.

The actual purchase rate or sales is impacted by eWOM (P. Y. Chen et al., 2004; Chevalier & Mayzlin, 2006; Dellarocas et al., 2007; Duan et al., 2008). In particular, purchase intention is positively associated with actual purchase (C. M. K. Cheung & Thadani, 2012). Like purchase intention, the volume of eWOM postings has been shown to improve sales (P. Y. Chen et al., 2004; Duan et al., 2008). Notably, an increase in positive eWOM postings (in particular, online reviews) is also seen to improve sales (Chevalier & Mayzlin, 2006). Purchase intention and sales improvements are two key and sought after effects of both WOM and eWOM.

In relation to purchase intention and sales, a person's product or brand choice or preference can be influenced by eWOM (Sun et al., 2006). For Sun et al. (2006) who had a focus on music related eWOM, it was found that participant choice of music and music-playing device could be influenced by eWOM. eWOM can also influence a web user's preferences or attitudes through the forwarding of online content or chatting in online communities (Sun et al., 2006). This has similar impacts to that of purchase intention; if eWOM can have an influence on people choices and preferences of brand or product choices and preferences, eWOM really is an effective form of free advertising (Y. Chen & Xie, 2008).

Brand attitude has also been found to be effected by eWOM in regards to valence. Although extremely positive eWOM content increases brand attitude, even just a moderate amount of negativity in eWOM can negatively affect brand attitude (M. Lee, Rodgers, & Kim, 2009). As such, negativity in eWOM content has a much larger impact than positive eWOM. This shows that in regards to eWOM there is both a negativity effect and an extremity effect (M. Lee et al., 2009).

Credibility of an eWOM source can also be impacted upon. As a consequence of reading the eWOM content, readers evaluate its credibility and as such will determine whether to act upon the information given (C. M. K. Cheung & Thadani, 2012). Cheung and Thadani (2012) suggest that the valence of eWOM and the credibility of eWOM are positively related. Those who engage in eWOM tend to have an innovative personality, know how to use different internet tools and have strong social networks in the first place (Sun et al., 2006). This shows that the source of eWOM as well as aspects of the actual eWOM content have a direct influence as to the impact of the effects of eWOM, such as its overall credibility or perceived usefulness.

WOM, both online and offline, is sought after due to its trustfulness. The receiver of WOM is assumed to be under the impression that the giver of the WOM is not receiving any kind of physical reward for doing so and as such the receiver is more open and accepting of the recommendation (Dichter, 1966). In this sense, WOM can be a free and very effective form of advertising as well as a free form of advertising (Y. Chen & Xie, 2008); our own friends and family can become advertisers who give us much more trusted advice than those of traditional advertising or sales people (Dichter, 1966).

This idea carries forth to that of eWOM where our sources of WOM increase to include those we do not know personally, but who we perceive as being an unbiased source of information. We trust this unbiased source of information over company advertising as companies are seen to use advertising as a sales tool whilst WOM represents friendly advice (Dichter, 1966). Our search for more trusted advice has become more plentiful in the online world; we must however determine for ourselves whether or not the eWOM we are reading is trustworthy.

2.3 Online Reviews

Online reviews are beginning to be viewed as their own category of both WOM and eWOM communication. Besides the antecedents and consequences of online reviews, much literature focuses around online review content and characteristics, valence, source credibility, usefulness and helpfulness. This online review research trend has been identified similarly in literature reviews on the topic, often organising the body of online review literature into categories such as sales and related variables, review dimensions, characteristics of reviews, the product category and the product itself (De Maeyer, 2012).

Discussed below are key pieces of literature on key topics researched thus far in the area of online reviews. Table 2 below summarises key online review related literature that is discussed in this section.

Table 2: Key Online Review Literature

Author and Publication Year	Study	Key Findings
Bambauer- Sachse & Mangold (2013)	Experimental design looking at four independent groups based on differing combinations of reviews and 4x2x2 betweensubjects design.	There is a clear differences in regards to consumer knowledge of review manipulation; those with the knowledge are less influenced in their review evaluations, especially negative reviews. Negative review effects are weaker when consumers gain knowledge through highly credible sources.
Bechwati & Nasr (2011)	Critical Incident method and content analysis.	There are several triggers to offline recommendations: both internal and external. External triggers include being asked for a recommendation and recommendations from hearing complaints. Internal factors include providing recommendations due to immense passion for the product or brand and self-interest motivations (to gain something from recommending). Delight is the main trigger of online recommendations
Benlian, Titah & Hess (2012)	Experimental study testing a conceptual model which links provider recommendations and consumer recommendations to	Provider recommendation users see significantly greater perceived usefulness and ease of use than users of consumer recommendations. Consumer review users see greater trusting beliefs and perceived affective quality than provider recommendation users. Consumer reviews saw greater perceived usefulness, trusting beliefs and perceived affective quality on

	consumer beliefs.	experience goods; provider recommendations saw greater effects of these same variables but for search goods.
Browning, So & Sparks (2013)	2x2x2x2 independent groups factorial design experiment.	Online reviews that evaluate hotels see remarks that are related to core services more likely to encourage positive service quality attributions. Recent online hotel reviews affect attributions of controllability for service delivery. Attributions of service quality are higher when reviews are mainly positive. Negative online reviews have an unfavourable influence on consumers' perceptions.
Chen & Xie (2008)	Normative model development.	Argue consumer reviews are a form of free sales assistants and that online consumer reviews can serve as a new element within the marketing mix. If there is sufficiently informative review information, the seller-created product attribute information and the buyer-created review information will interact with one another.
Chevalier & Mayzlin (2006)	Effect of consumer reviews on relative sales of books at Amazon.com and bn.com.	Both Amazon.com and bn.com saw overwhelmingly positive reviews, however there were more and longer reviews at Amazon.com. Improvement in reviews leads to an improvement in relative sales at that website. The impact of one-star reviews is greater than that of five-star reviews. Customers do not rely solely on summary statistics; customers read the actual review text.
Cui & Lui (2010)	Analysis of panel data from new product online reviews and sales data from Amazon.com.	Negative reviews have a greater influence on new product sales than positive reviews; confirm a negativity bias amongst consumers. WOM effects are larger and increasing in the growth stage of the product lifecycle. eWOM has a stronger effect in the product lifecycle's early stages; affecting consumer purchases earlier on and leading to shorter product lifecycles in the online environment.
De Maeyer (2012)	Literature review of research which focuses on the relationship between consumer reviews and sales.	Literature on consumer reviews and sales can be categorised into six categories: sales, review dimensions, reviewer characteristics, reader characteristics, product category and product.
Duan, Gu & Whinston (2008)	Looks at the persuasive effect and awareness effect of online reviews (from Yahoo!Movies and BoxOfficeMojo) on the daily box office performance.	Online review rating has no significant impact on box office revenues which indicates that online reviews have little persuasive effect on purchase decisions. The volume of online review postings does have a significant influence on box office sales which indicates the importance of awareness effect.
Flanagin & Metzger (2013)	Experiment whereby a fictitious movie rating website was viewed by participants who then responded to a series of questions.	There is a positive association between the ratings volume and user-generated content trust, reliance and confidence. There is also a positive association between the reader's own and other's opinions. People tend to favour expert opinions when the information volume is low, but favour user-generated information when the information volume is high.
Hu, Liu & Zhang (2008)	Portfolio approach using data was gathered from Amazon.com's web service (AWS) with a	In reading online reviews, consumers pay attention to contextual information (e.g. reviewer reputation) as well as review scores. Reviewers with a better reputation and higher exposure

	panel of books, DVDs and videos.	see greater favourable market response. The impact of online reviews on sales decreases over time.
Korfiatis, García- Bariocanal & Sánchez- Alonso (2012)	Theoretical model development based on conformity, understandability and expressiveness. Four basic readability measures were applied on Amazon UK reviews to look into the relationship between helpful votes and review text style.	Review readability has a greater effect on review helpfulness than length. Readability tests show a directional relationship with reviews of average length and their helpfulness; this relationship is true for moderate and extreme scores.
Kusumasondja ja, Shanka & Marchegiani (2012)	2x2 experimental design using online hotel reviews with a focus on credibility.	Negative online reviews are perceived to be more credible than positive online reviews when the reviewer is disclosed. Positive reviews generate more initial trust than negative reviews when the reviewer is disclosed. When the reviewer is not disclosed there is little difference between positive and negative reviews in regards to perceived credibility or consumer trust.
Lee, Rodgers & Kim (2009)	One-factor, between- subjects design experiment with a control group investigating valence and brand attitude.	Extremely positive reviews increase brand attitude, however this is negated by even a moderate amount of negativity. Extremely negative reviews have a stronger influence on brand attitude than moderately negative or extremely positive reviews. This supports the existence of both a negativity and extremity effect. Moderately negative and extremely positive reviews have a similar amount of influence on brand attitude.
Lim & Chung (2011)	Experimental study (between-subjects) investigating the impact of WOM on receivers search and credence attribute ratings.	Negative WOM is more effective in changing credence attribute evaluations than of search attributes for unfamiliar brands. There is a significantly lower impact of negative WOM on search attribute evaluation than on credence attribute evaluation.
Ludwig, Ruyter, Friedman, Brüggen, Wetzels & Pfann (2013)	Content analysis of online reviews of books on Amazon.com.	Larger increases in positive affective content has a lesser effect on successive increases in conversion rates; this effect does not occur in negative affective content. Positive changes in affective cues and an increase in congruence with the product interest group's typical linguistic style increases conversion rates both directly and additionally.
Mudambi & Schuff (2010)	Model development of customer review helpfulness using Amazon.com reviews.	Review extremity, depth and product type affect perceived review helpfulness. Product type is a moderator on the effect of review extremity on review helpfulness. Reviews with extreme ratings are less helpful than moderate ratings for experience goods. Review depth has a positive effect on review helpfulness for both product types; although review depth has a more positive effect on review helpfulness for search goods.

Park & Lee (2009a)	Personal interviews with students and business workers in Seoul, Korea and Tennessee, USA who are internet shoppers.	National culture has moderating effects on the relationships between online reviews and its antecedents. Attitude-oriented marketing communication strategies are more effective for Korean consumers; behaviour-oriented marketing communication strategies are more effective of U.S. consumers. Korean's use online reviews more often but shop less on the internet. It is suggested that American's instead use online reviews largely for internet shopping and less for simply browsing (as Korean's do). Thus, usage frequency impact of online reviews might be larger for American consumers than for Korean's.
Purnawirawan, de Pelsmacker & Dens (2012)	3x4 full factorial between-subject design experiment.	Review set balance and sequence affects the perceived usefulness of that review set. Unbalanced review sets, be that positively or negatively swayed, are seen to be more useful than balance (or neutral) review sets. The sequence of reviews in a review set has an effect on the perceived usefulness but only for unbalanced (positive or negative) review sets.
Racherla & Friske (2012)	Research model built upon the stream of literature surrounding how people are influenced by information. Online reviews from Yelp.com are used.	A combination of review and reviewer characteristics are significantly associated with perceived review usefulness. The presence of sociodemographic information (e.g. real name, photo) does not contribute significantly to perceived usefulness. Perceived usefulness is significantly affected by reputation and expertise. Expertise is negatively associated with usefulness. Reviewer expertise is valued more for experiential and credence services than for search. Negative reviews have better perceived usefulness than extremely positive or moderate reviews; strongly supporting the idea of a negativity bias.
Smith, Menon & Sivakumar (2005)	Study one was a 2x2x2 between-subjects experimental design with two control groups. Study two was a 2x3 between-subjects experiment.	It is suggested that people use peer recommendations for decision making irrespective of the recommender's personal characteristics. However, perceived peer expertise is of more importance for utilitarian shoppers than hedonic. Preference for peer over editorial recommendations depends on the shopping goal of the reader; utilitarian or hedonic.
Sparks, Perkins & Buckley (2013)	2x2x3 factorial between-subjects designed experiment using simulated webbased content.	Generally, tourists see specific information by customers as the most useful and trustworthy information. Purchase intention is influenced mainly by the overall attitude and beliefs in corporate social responsibility.
van Noort and Willemsen (2011)	Online experiment with participants exposed, randomly, to a certain stimulus material (1 of 6) and asked to inspect a blog website. This was followed by a series of questions relating to their evaluation of the brand, the webcare response and effectiveness of stimuli.	Brand evaluation is more favourable when the focal brand responds to negative WOM compared to when they say nothing; that webcare positively influences brand evaluations after negative WOM. Consumer brand evaluations are positively influenced by webcare when it uses a conversational human voice. This is contingent on both the platform (consumer-generated or brand-generated) and the strategy used (reactive or proactive). In both platforms, human voice was perceived in reactive webcare. Proactive webcare on generated perceptions of conversational human voice, but only for consumer-generated platforms.
Vermeulen & Seegers (2009)	Experimental study applying Consideration Set Theory to model	When people are exposed to online reviews, their hotel consideration is improved. Both positive and negative reviews increase consumer awareness of hotels. As well

	online hotel reviews impact on consumer choice.	as this, positive reviews increase attitudes toward hotels. The effects found are stronger for lesser-known hotels and the expertise of the reviewer was found to only have a minor, but positive, influence on the impact of the review.
Willemsen, Neijens, Bronner & de Ridder (2009)	Content analysis of online reviews of experience and search goods which were posted on Amazon.com.	Content characteristics are principal in understanding perceived review usefulness. Argumentation (both density and diversity) is a significant predictor of perceived usefulness. Valence is also a predictor of perceived usefulness but is dependent on product type (search or experience). Expertise claims were only weakly related to online review perceived usefulness.
Zhang & Watts (2008)	Heuristic-Systematic model of information processing to investigate information value. An online survey was used.	Perceptions of the argument quality and source credibility of an online posting influences information adoption; as is supported by the heuristic-systematic model. There is a highly significant relationship between argument quality and information adoption; heuristic processing does occur in the online environment. Source credibility is important in regards to a heuristic cue for assessing information; however the design features of the online community seem to affect the extent to which this cue is relied upon.

2.3.1 Causes and Effects of Online Reviewing

The causes and effects; antecedents and consequences of online review use has been looked into at some depth. These appear similar to that of eWOM research discussed prior; to be expected with online reviews being a platform of eWOM. Effects of online reviews appear to be more researched than the causes, however key literature in both are discussed below.

A key trigger of online reviewing or recommending is that of delight. Bechwati and Nasr (2011) used the critical incident method and content analysis to investigate triggers to online reviewing. Besides finding delight to be the key motivation behind online review participation, they also found that a large group of those who made recommendations did so as a result of others seeking advice or complaining (Bechwati & Nasr, 2011). People generally take reviewing products and services seriously, wanting to provide advice and information that is both relevant, accurate and honest, along with ensuring they warn others of any negative experiences (Bechwati & Nasr, 2011).

In regards to the effects or consequences of online reviews, one notable for both consumers and businesses alike is that of sales. It should be noted that online reviews can effect sales in regards to product lifecycles. The effects of WOM are larger and accumulating in the growth stage of the product lifecycle. In comparison, eWOM sees greater effects in the product lifecycle's early stages; this in turn affects consumer purchases earlier on and can lead to shorter product lifecycles in the online environment.

When product reviews improve, sales tend to increase for that product on that website (Chevalier & Mayzlin, 2006). It is also argued that the impact of online review's on sales

decreases over time; as such it is suggested that incentives to write reviews are not needed over a certain time period (Hu, Liu, & Zhang, 2008). Online reviews can influence people's choice in general (Sun et al., 2006) which itself can impact on sales. Online reviews can play an important role in the decision making process, especially today when we rely so heavily on the online environment as an information source.

Contradicting this, it has also been found that online reviews for movies have little effect on box office sales (Duan et al., 2008). Rather than sales being influenced by the rating of online reviews, Duan et al. (2008) found that it was the volume of reviews that influenced sales. This suggests that reviews themselves have little influence on the purchase decisions of consumers, and instead highlights the potential importance of an awareness effect (Duan et al., 2008). It is this unexpected awareness effect which indicates towards the importance and strength of the underlying WOM which is impacting on sales.

Despite this contradiction, this study focussed on movies where as Chevalier & Mayzlin (2006) focussed on books. It is possible that the product category itself may influence the effects of online reviews (De Maeyer, 2012). Vermeulen and Seegers (2009) looked into the hotel category and found the lesser-known a hotel the more beneficial online reviews are. More well-known hotels do not benefit from online reviews to the extent that lesser-known hotels do (Vermeulen & Seegers, 2009) and similar findings have occurred in that of the video gaming industry (Zhu & Zhang, 2010).

Like sales, it is difficult to conclude whether these results could be replicated to other product categories. The valence of online reviews in regards to its usefulness may also be dependent on the product type (Willemsen, Neijens, Bronner, & de Ridder, 2009). It does however suggest that product category or product type does have the potential to influence the effects of online reviews. Overall, there appears to be no concrete consensus in research as to whether product type or category has any influence on the effects of online reviews; this is an area that needs further investigation.

2.3.2 Review Content and Characteristics

Another common research area within online review research is that of the content and characteristics of reviews. This often focuses on the surface characteristics such as the balance and sequence and ratings of online reviews. However, there are a few studies which look deeper into the actual content of reviews such as the arguments formed in the writing itself.

2.3.2.1 Balance and Sequence of Reviews

The balance of online reviews looks into the ratio of positive reviews to negative reviews. This has been found to have an influence on people's perceptions of online reviews. An unbalanced set of reviews is one in which there are more positive than negative reviews, or vice versa; that

there is an uneven ratio of positive to negative reviews (Purnawirawan, de Pelsmacker, & Dens, 2012). An unbalanced review set is more helpful than a balanced one (with an even ratio of positive to negative reviews – a neutral set of reviews) (Purnawirawan et al., 2012). This represents the idea of consistency in information representing truthfulness to the reader; that if everyone is saying the same thing that the information must be true (Purnawirawan et al., 2012).

The sequence of reviews in a review set can also have an influence on review readers. It has been found that in positively skewed review sets, a sequencing of positive-negative-positive reviews, a 'positive wrap', improves the perceptions of readers. The same occurs in negatively skewed review sets with a 'negative wrap' (negative-positive-negative sequence) (Purnawirawan et al., 2012). However, the sequence only has an effect for unbalanced review sets, be that positive or negative (Purnawirawan et al., 2012).

2.3.2.2 Individual Review Star Rating and Content

Current online review literature has had a large focus on analysing the rating of the review (Flanagin & Metzger, 2013; Purnawirawan et al., 2012; Yang & Mai, 2010). The ratings volume (or the number of ratings) positively signals trust, reliability and confidence, as well as forming associations with quality (Flanagin & Metzger, 2013; Yang & Mai, 2010). Reviewer and reader opinion congruence influences trust and confidence in a review (Flanagin & Metzger, 2013).

Review valence has been investigated extensively. It has been consistently found in online review research that negative reviews have a greater influence on readers than positive reviews (Browning, So, & Sparks, 2013; Chevalier & Mayzlin, 2006; Cui, Lui, & Guo, 2010; Kusumasondjaja, Shanka, & Marchegiani, 2012; Mudambi & Schuff, 2010; Racherla & Friske, 2012; Sparks, Perkins, & Buckley, 2013; Yang & Mai, 2010). This greater influence of negative reviews however is unfavourable on readers perceptions (Browning et al., 2013). More specifically, for unfamiliar brands, negative reviews are more effectively able to change credence attributes than search attributes (Lim & Chung, 2011). Also, valence has a higher impact on sales for search over experience products (Cui et al., 2010). It is apparent from this that for online reviews (and in fact eWOM in general), there is a negativity effect and an extremity effect (M. Lee et al., 2009) and overall show that valence is a key influencer to online review readers.

Positive reviews do still have some influence on readers in that they can induce more initial trust especially when the reviewers identity is disclosed (Kusumasondjaja et al., 2012). Reviewer (or source) identity disclosure leads to higher perceived credibility (Kusumasondjaja et al., 2012). Review valence and source credibility can interact to increase (or decrease) the credibility and trust induced from reviews.

The actual content of online reviews has also been a focus of much past research (Chevalier & Mayzlin, 2006; Korfiatis, García-Bariocanal, & Sánchez-Alonso, 2012; Mudambi & Schuff, 2010; Sparks et al., 2013; R. Zhang & Tran, 2010). Many reviews tend to be accompanied by

summary statistics. However, Chevalier and Mayzlin (2006) have found that people tend not to rely on these summary statistics alone; people tend to read the content itself more so than rely solely on the summary statistics. As such, the review content itself holds much importance.

Differences in the actual content of a review, ignoring surface characteristics like star ratings and reviewer characteristics, are related to differences in the perceived usefulness of reviews (Willemsen et al., 2009). For example, in research utilising online reviews of hotels specifically, comments made in the review content that centred around the core services provided were more successful in encouraging positive attributions towards the service quality of the hotel (Browning et al., 2013). Whether these findings occur across all industries it is unknown. Thus, what is actually written in the content of a review is highly important and this illustrates the notion that not all reviews are created equally, nor are they evaluated equally (Willemsen et al., 2009).

Likewise, the argumentation presented in a review has a significant influence on readers. Both the density of an argument (the more arguments presented in a review to support their claims) and the argument diversity (a diverse range of both positive and negative arguments) are both significant indicators of a reader's perceived usefulness of a review (Willemsen et al., 2009). Thus the argument presented in a review is of importance to the reader in deciding whether the information presented is useful.

Oftentimes, online review websites (as well as comments on blog websites) see management responses to negative experiences. These negative experiences can cause negative brand evaluations. Management responses aim to negate this. It was found by van Noort and Willemsen (2011) that these negative brand evaluations which are caused by negative WOM (such as that from negative online reviews) can be weakened by management monitoring and intervening by responding to these negative experiences. Using a conversational human voice, dependent on the strategy implemented, brand evaluations are positively affected. Both platforms see a perception of conversational human voice in reactive webcare; perceptions of conversational human voice developed in proactive webcare but only for consumer-generated platforms.

2.3.2.3 The Reviewer and Source Credibility

The reviewer or the source of the online recommendation plays a role in how online reviews are perceived and used. Reviewer characteristics have an influence; be that physical or personality. Likewise, the credibility of the source itself also has an influence and has been researched somewhat thoroughly.

Reviewer characteristics such as national culture have some effect on how people use online reviews (Park & Lee, 2009a). It was found that different cultures use online reviews differently. Koreans tend to use online reviews more often than Americans, however they shop less online than American's do (Park & Lee, 2009a). Thus, it appears that Americans use online reviews more for online shopping whilst Koreans tend to use online reviews for more browsing

purposes. This suggests that the usage frequency impact of online reviews could be larger for American consumers than for Korean consumers (Park & Lee, 2009a).

Besides the physical attributes of a reviewer or source, the reviewer's writing characteristics have an influence on how helpful a review is perceived to be. Reviewers who post actively, use the product or service frequently and, generally, give lower ratings are those who are perceived to be more helpful (H. Lee, Law, & Murphy, 2011). This suggests that the perceived helpfulness of reviewers is not so much in who they are, but in how they write.

Source credibility has been found to play an important role in the impact of online reviews (Flanagin & Metzger, 2013; Kusumasondjaja et al., 2012; Smith, Menon, & Sivakumar, 2005; Sparks et al., 2013; Willemsen et al., 2009; R. Zhang & Tran, 2010). The credibility of the source of the review (the reviewer) creates a positive expectation towards the review content (R. Zhang & Tran, 2010). Peer recommendations, or user-generated recommendations, are more trustworthy and useful than those from marketers or editorial content (Sparks et al., 2013) and this is especially true for hedonic purchases (Smith et al., 2005).

Even so, recommendations from standard users are seen to be less credible than recommendations from experts (e.g. movie recommendations from fellow users versus movie critics). Expert users are perceived not only as more credible, but also more accurate and more reliable (Flanagin & Metzger, 2013). This notion suggests that source expertise is still influential on consumers information quality judgements (Flanagin & Metzger, 2013).

There are instances where expertise claims have not had a positive influence on usefulness; Racherla and Friske (2012) for example. Their study found a negative correlation between expertise and review usefulness. This however could be due to a number of factors including the type of services studied and the notion that expertise claims can often be of a more neutral valence (Racherla & Friske, 2012). Overall, expertise claims only appear to have a weak relation to the perceived usefulness of reviews (Willemsen et al., 2009).

The credibility of the source contributes to a positive expectation of the information given in the content of the review (W. Zhang & Watts, 2008). Source credibility, along with the quality of the review argument, are suggested to be the most important elements which have an influence on the perception of online reviews (W. Zhang & Watts, 2008). It is suggested that the effects of negative reviews are weakened when the reader has gained information through a highly credible source compared to that of a less credible source; highly credible sources have more influence (Bambauer-Sachse & Mangold, 2013). This is something to be noted due to the negativity and extremity effects apparent in the valence of online reviews (M. Lee et al., 2009) and as such could be a way to help offset the stronger effects of negative reviews.

2.3.2.4 Perceived Usefulness and Perceived Helpfulness of Reviews

Both the perceived usefulness and perceived helpfulness of reviews is another popular area of research within online review literature. Research has largely looked into the influence of review content on the perceived usefulness and perceived helpfulness, although the influence of the

reviewer has also been investigated. Some review websites actually contain helpful and unhelpful ratings of each review of which readers can indicate which reviews were helpful to them; where this occurs there is a strong indication that this score can accurately model the true perceived helpfulness of a review (R. Zhang & Tran, 2010).

Perceived review helpfulness and usefulness is associated with peripheral cues which include the credibility of the reviewer, central cues, the rating given in the review and the written content of the review (Baek, Ahn, & Choi, 2012-13; Racherla & Friske, 2012). Both the review characteristics and the reviewer themselves are peripheral cues of which their characteristics are significantly related to perceived usefulness (Racherla & Friske, 2012). Reviewer characteristics which influence perceived influence include their reputation and expertise. This can also work in reverse where review usefulness can increase a reviewers reputation in that community (Racherla & Friske, 2012).

The actual content of the review itself can have an influence on the overall perceived helpfulness and usefulness reviews. Looking below the surface characteristics of reviews, such as the star ratings or product price, differences in the actual content are related to differences in perceived review usefulness (Willemsen et al., 2009). Content characteristics such as the argumentation density and the argumentation diversity are significant predictors of perceived review usefulness (Willemsen et al., 2009). Also, information consistency within the review, in regards to being consistently negative or positive, is perceived as more useful than inconsistent information in a neutrally balanced review (Purnawirawan et al., 2012).

Likewise for review helpfulness, the depth of a review has been found to have a positive effect; this is more apparent for search goods than for experience goods (Mudambi & Schuff, 2010). The readability of the review has an influence on the perceived helpfulness of a review, more so than the actual length of writing of the review (Korfiatis et al., 2012). The extremity of a review also has a positive effect on perceived helpfulness, however this is moderated by the product type (Mudambi & Schuff, 2010). This suggests that the argument presented in and actual content of a review is valuable to readers.

Likewise, using an experimental method involving web-based content, Sparks et al. (2013) found that specific information is important to readers. Specific is perceived by readers to be the most useful and trustworthy information, compared to vague details or simply relying on summary statistics (Sparks et al., 2013). An example of an informative review is that where the two product information types interact: seller-created product attribute information and buyer-created review information (Y. Chen & Xie, 2008). This suggests that readers want to know the details; informative reviews which incorporate different types of information for a more comprehensive review.

The product itself can also have an influence on perceived review usefulness. Testing a conceptual model using online reviews from Amazon.com, Benlian, Titah and Hess (2012) found that consumer reviews are more useful for experience goods. Consumer reviews generate more trust and perceived affective quality, along with being perceived as more useful overall for experience goods (Benlian, Titah, & Hess, 2012). Search goods on the other hand

see provider recommendations generating more perceived usefulness and trust (Benlian et al., 2012). This reflects the idea that people look for different information depending on the product or service they are researching.

2.3.3 Other Online Review Research Areas

Within the collection of past research on the topic, numerous theories have been used in investigating online reviews. These include signalling theory to explain the filtering of social information online (Flanagin & Metzger, 2013); dual process theories in discovering how people change their information source focus in reading reviews dependent on their reason for reading reviews (Baek et al., 2012-13); and a linear model has also been suggested in proposing the helpfulness of reviews (R. Zhang & Tran, 2010).

Other areas of past research surrounding online reviews has shown that those with greater knowledge surrounding review manipulations tend to be less influenced in their evaluations of products by reviews (Bambauer-Sachse & Mangold, 2013). The linguistic style of online reviews has also been researched and suggest positive changes in review affective cues and an increase in congruence with the product interest group's usual language style can both directly and further increase conversion rates for the reviewed product (Ludwig et al., 2013).

What has not been researched is how people actually read online reviews. There is a gap in research to identify any patterns that exist in the reading of online reviews and what it is that readers of online reviews pay attention to. The majority of past online review studies are experimental or survey based and they only focus on the single concept that they are aiming to investigate.

2.4 How People Read

Research into how it is people read spans numerous disciplines; in this literature there is a focus on marketing and advertising reading-based research. This specific are of research is focused on due to the nature of the eye-tracking device used. Eye-tracking requires an understanding on how people read; in our case, specific knowledge as to how people read on a screen and in a marketing context. Research in this area discussed in this literature review includes research with a focus on screen-based reading behaviour and eye-tracking in particular. This is followed by a look into past notable eye tracking studies. Table 3 summarises the key reading literature discussed in this section. This area of literature supports research questions two and three; it allows for an understanding of gazes which will contribute to the understanding of how a reader's gazes and choices related as well as an understanding of how reading behaviour could be influenced by personal characteristics. For both of these research questions, a base understanding of how people read in general; reading patterns and behaviours, is required.

Table 3: Key Literature on How People Read

Author and Publication Year	Study	Key Findings
Beymer, Russell & Orton (2008)	Between-subjects designed eye- tracking study looking at how font size and type affect reading.	Smaller font sizes see significantly longer fixation durations and, as such, slower reading times. There was no significant difference between serif and san serif fonts.
		Demographic variables like age or English as a native language saw significant eye-tracking differences.
Buscher, Biedert, Heinesch & Dengel (2010)	Exploratory study using eye- tracking to look into preferred reading regions.	Visual attention on a screen is not distributed evenly; individual users have preferred reading regions when using long documents.
Castelluccio (2004)	Eye-tracking computer usage.	Eyes tend to fixate on the upper left side of a page first, hovering there before going left to right. Once the top portion of the page is examined, eyes then explore the rest of the page.
		Dominant headlines attract readers when they first enter the page. Headlines and blurbs need to be short. Ads are generally disregarded by readers.
		Smaller font size encourages focussed viewing; larger type encourages scanning.
Chang (2013) Experiment involving ads a pictures followed by questionnaire.		Imagery fluency, in regards to narrative processing, is affected by differing factors. Narrative pictures, rather than product pictures, increase comprehension and imagery fluency. This can further affect ad judgements (ad and brand attitudes). Accessible narratives, rather than less accessible, increase comprehension fluency and enhance imagery fluency.
Hornbaek & Frokjaer (2003)	Exploratory experiment looking at reading patterns and the effects of interfaces; linear, fisheye and overview+detail interface.	Overview+detail interface saw participants gaining higher grades for their essays; all (except one) preferred this interface. Fisheye interface sees more time spent on getting an overview of the documents and less time reading details; documents read faster but lower incidental learning is displayed.
Just & Carpenter (1976a)	Same-Different experiment task, recording eye fixations during decision making.	Suggests that total processing time in sentence verification is distributed amongst differing stages. Initial gaze on a sentence suggests 700msec at most is needed to read and represent the sentence.
		True positive condition response time was 1400msec; true negative was 1900msec. 500msec difference can be attributed to comparison operations between a sentence and a picture.
		Negative sentences take longer to process. Largest portion is the comparison time; 267msec longer for negative sentences. Next is reading time; negatives 57msec longer.
Liu (2005)	Survey investigating reading behaviour.	A screen-based reading behaviour is developing. This sees more time spent on browsing, scanning, keyword spotting, and less time on in-depth and concentrated reading.
		Reading time has increase; may be due to an explosion on information and digital technology.

		80% of people still generally or always print out electronic material to read hardcopy.
Porta, Ravarelli & Spaghi (2013)	Eye-tracking used to look into the effects of the thematic connection between banner subject and article content.	Imposed reading congruity can increase banner fixation numbers but the total fixation duration is not affected. Congruity here did not affect memory or recognition. Free reading congruity can increase both banner fixation numbers and total fixation duration.
		Congruity here improves memory.
Rapp (2008)	Experimental and analogous methodology, with participants reading stories and answering comprehension questions.	Inaccurate information takes longer to read than accurate information; suspenseful contexts decreased this difference. Prior knowledge influence's considerations of inaccurate information; this can be reflective of story contexts.
Rayner (1998)	Literature review on eye movements in reading.	Saccades are eye movements made continuously when we read, search or look at a scene. Fixations are when our eyes remain relatively still in between saccades for around 200-300 milliseconds. Overall, eye movement research is valuable in the study of reading and information processing. Eye movement research is very informative in looking at moment-to-moment processing activities.
Reichle, Rayner & Pollatsek (2003)	Updates to the E-Z reader model	Adjustments made to the E-Z reader model as it was found not to account for many of the effects of higher-level linguistic processing on eye movements.
Wedel & Pieters (2008)	Case study of eye-tracking in ad pretesting and review of eye-tracking literature.	Eye-tracking studies have become more commonplace. Eye-trackers today are relatively low cost, quick to calibrate and are unobtrusive to participants have contributed to the growth and popularity of eye-tracking in research. Eye-tracking allows for insights into communication processing and effectiveness; this cannot be gained through traditional means due to unconscious actions and speed.

To start with, it should be noted, especially when focussing on online reviews and eWOM, that negative content takes longer to read than positive. The majority of additional processing time for negative content is comprised of comparison operations; often that of comparing sentence information with accompanied images (Just & Carpenter, 1976a). This also supports the idea of images themselves having an influence on how people read. In studies researching sentence verification it has been found that negative sentences see longer response times and more errors are made. Negative sentences see additional processing time; between 300 and 1200msec (dependent on the sentence's linguistic structure) (Carpenter & Just, 1975).

In general, images influence how people read. Chang (2013) looked at the cognitive processes surrounding how narrative advertisements are processed. This study suggests that narrative pictures increase comprehension fluency and imagery fluency more so than product pictures (Chang, 2013). This suggests that, in the case of online reviews, readers may find reviewer photos which match their experiences more useful and better comprehended than those simply provided by the hotel.

Prior knowledge also has an influence on reading comprehension. Incorrect information takes longer to read than accurate information (Rapp, 2008). This suggests that prior knowledge could have an influence on reading times or speeds. There is also potential that this may hold true for incongruent opinions. If information is identified by readers to be inaccurate, their reading speed could be influenced.

2.4.1 Screen-Based Reading

Our reading behaviour has changed along with how (and on what platform) we read. We have and are still changing into a digital society where we read more often than not via the likes of computers, e-readers or smartphones. Through Liu's (2005) research involving self-report measures, it was found that we do indeed spend more of our time reading in this digital age; a screen-based reading behaviour is developing (Liu, 2005). This screen-based behaviour involves more time spent on scanning, browsing and keyword spotting and less time spent on in-depth and concentrated reading.

The increase in reading that is evident can be attributed to both the digital age and with the explosion of information now available to us (Liu, 2005). Despite this, 80 per cent of people still print out screen-based or digital content to read as a hard-copy and there is still a large preference for hard-copy material (Liu, 2005). However, looking at how reading behaviour has changed with an increase of digital reading platforms, it is likely that people will gradually develop a more screen-based reading behaviour (Liu, 2005). Over all this has serious implications for the likes of online reviews; with people spending more time reading online, the importance of screen based reading is shown.

Key eye-tracking researchers Just and Carpenter (1976b) discuss the use of a corneal-reflection eye camera for eye-tracking research. They suggest that there is no single reading process; rather our reading process changes dependent on our situation (Just & Carpenter, 1976b). More recent research suggests general reading patterns do exist in an online context; this could be viewed as what Just and Carpenter (1976b) referred to as a situation. It is suggested that viewers have preferred reading regions on a computer screen which vary in size and in location on the screen (Buscher, Biedert, Heinesch, & Dengel, 2010). People tend to first fixate on the upper left side of the webpage; gazing at the top of the page and then gazing down the page from left to right (Castelluccio, 2004). This is logical for those in a Western society where left to right, top to bottom reading is the norm.

A key area of difference between reading on a screen versus reading on a hard, paper copy document is the ability to scroll. This has been investigated by several researchers. For one, it is suggested that the time spent scrolling is a decent signifier of reader interest (Claypool, Le, Waseda, & Brown, 2001). Through scrolling it can also be understood how it is readers comprehend the material. Readers with better comprehension tend to have longer pauses in between scrolling and a greater number of individual scrolling movements. Faster readers tend to do the opposite; less time spent pausing in between scrolling (Dyson & Haselgrove, 2001). In

other words, to read faster people tend to reduce the time taken to pause in between scrolling movements.

When under pressure, comprehension is changed by the way in which the document is read; increasing the reading rate by reducing the time spent pausing and by changing the nature of the scrolling movements. The degree to which people read during scrolling could influence the maximisation of reading comprehension. If readers are reading whilst they are scrolling, there could be a compromise between pause time and scrolling time (Dyson & Haselgrove, 2001). Despite the noise potentially created through scrolling on a website, the average scroll distance of a reader is useful in regards to the vertical spread of the gaze distribution on the screen (Buscher et al., 2010). In looking at this aspect of screen-based reading, it is apparent the use of scrolling on most websites could influence the way in which the document is both read and understood.

In a study which saw the eye-tracking of readers of mock news websites and real multimedia content, it was found that navigation bars on the right-hand side of the webpage see superior usage. This could be due to the novelty factor of right-hand navigation (Castelluccio, 2004). Better reading performance was also apparent with shorter paragraphs, the use of titles and the use of blurbs (Castelluccio, 2004). The design of a website also has an influence on reading. An overview+detail interface, with linear text and images and an overview pane, was found to be the most effective interface in a study that looked at reading patterns and interfaces using progression maps (Hornbaek & Frokjaer, 2003). Thus webpage design does play an important role in influencing how people read.

Advertisements on websites have been investigated by numerous researchers. It has been found that people have a tendency to ignore anything on a website which looks like an ad banner (Dreze & Hussherr, 2003). The majority of people disregard ads, with 32 per cent not remembering the ad at all (Castelluccio, 2004; Porta, Ravarelli, & Spaghi, 2013). Ad banners are a frequent component of webpages today; of which it is apparent they do not play a significant role in reading patterns, rather they are generally ignored.

Font size is another key, but seemingly small, component of websites which do influence how people are reading the webpage. Through eye-tracking studies it has been found that smaller font sizes increase fixation durations with longer focussing times (Beymer, Russell, & Orton, 2008; Castelluccio, 2004). Despite differences being found for certain demographic variables such as native language, there is no significant difference in reading between serif or sans serif font types (Beymer et al., 2008). Overall, smaller font sizes see slower reading times and more focus whilst larger font sizes see more scanning (Beymer et al., 2008; Castelluccio, 2004).

Different reading types or conditions also have an influence on reading patterns. For one, whether the reading is imposed or free has an influence on how we read. Imposed reading is when the respondent is set an article to read. Free reading is where the respondent chooses which article to read from a set and more accurately represents a real life reading situation (Porta et al., 2013). In an eye-tracking study researching the influence of congruity on ad banners and online newspapers, it was found that imposed reading saw congruity increase the

number of fixations on the ad banner (Porta et al., 2013). Free reading on the other hand saw congruity increase both the number of ad banner fixations and the total fixation duration (Porta et al., 2013).

Overall, it is apparent that we as a society are developing a screen-based reading behaviour. Whether there is an overall pattern in existence it is not apparent. What is apparent is that according to much literature there are many aspects of screen-based reading that must be taken into account and looked into when looking at reading patterns via a screen. No research has addressed the issue that personal characteristics and personality traits could also influence the way in which people read in this screen-based setting.

2.4.2 Eye-tracking

Eye-tracking has been used in numerous pieces of reading-related research. Today's eye-tracking systems are low cost in comparison to both old systems and other researching systems, they do not take too long to calibrate and they are an unobtrusive method of research (Wedel & Pieters, 2008). As such, eye-tracking and eye movement research has grown in popularity in recent times, for both marketing practice and theory development research (Wedel & Pieters, 2008).

To start with, it is important to note how it is we physically read. Despite the feeling of our eyes moving in smooth strokes, our eye movements are in fact combined of two very different aspects: fixations and saccades (Buswell, 1935). Fixations are movements where the eye is somewhat still (Wedel & Pieters, 2008). This does not mean eyes are fully still during a fixation, only somewhat; rather there is a constant tremor of the eyes even during fixation called a nystagmus (Rayner, 1998). Fixations last approximately 200-500 milliseconds, during which a contactual area of the scene is projected onto the back of the eye on the fovea in order to be processed in detail (Rayner, 1998).

Saccades on the other hand represent the continual eye movements made during reading, looking or searching. They are jumps our eyes make that are rapid and somewhat ballistic (Rayner, 1998; Wedel & Pieters, 2008). Saccades last approximately 20-40 milliseconds and project only specific locations of a scene to the fovea. These saccades are so rapid they are actually the fastest movement the human body can make. They are so fast, in fact, we make around 170,000 of them every day (Rayner, 1998).

Together, fixations and saccades can make patterns across whatever it is we are reading or looking at; such as an advertisement or a computer screen. This pattern of fixations and saccades is called a scanpath (or scan path) (Noton & Stark, 1971). Scanpaths can occupy around 25 to 35 percent of a readers viewing time, with the rest of that time being dedicated to other, less regular, eye movements (Noton & Stark, 1971). Eye-trackers can trace these scanpaths; patterns of fixations and saccades, that a reader is making across whichever stimulus they are looking at or reading.

Much eye-tracking based research looks to simply trace patterns or identify important aspects of reading material. Others attempt to create models such as the E-Z reader (Reichle, Rayner, & Pollatsek, 2003). Reichle et al. (2003) tested the E-Z reader model to find that it did not account for many of the effects of higher-level linguistic processing on eye movements; as such the model was adjusted. Much recent eye-tracking research with a focus on the online environment tends to look more at reading patterns than model testing or creation.

Some studies, such as Daugherty and Hoffman's (2014) study, have already used eye-tracking in an online environment. This study measured consumer attention using an eye-tracker on several eWOM product pages. This study revealed that strong attentional differences exist in regards to eWOM content and brand type. It also showed that eye-tracking is a valid measurement tool for online-based research and, more specifically, eWOM.

Overall, eye-tracking is becoming a popular way to research the influence of stimulus on consumer reading or viewing. Today's eye-trackers are an unobtrusive and relatively inexpensive way to get visual data about consumer reading patterns. In regards to what readers are looking at or paying attention to, eye-tracking is a great method of research as the eyes do not lie (Davenport & Beck, 2001).

2.5 Personal Characteristics and the Reading of Online Reviews

The majority of online review literature focusses on single review factors and how they impact on the reader. What they lack is acknowledgement of the reader influencing how they read online reviews and that readers are all unique. It is for this reason that this thesis is based on the idea that all readers differ in their personal characteristics and it is these which may influence the reading behaviour of online reviews.

These personal characteristics include the level of optimism, thinking style (be that analytic or holistic), their need to evaluate, their level of personal involvement in online reviews and their level of dispositional trust. These traits could transfer onto how people read; what they focus on and their reading patterns. Trust is a key characteristics discussed often in past online review literature. Consumer reviews in general generate trust (Benlian et al., 2012); eWOM is a sought after source of information for consumer due to the trust they have in this consumer-generated source of information (Dichter, 1966). Likewise, trust could influence what additional review factors a person reads in support of the review content, in order to meet their trust expectations of the review or reviewer. With the discussion of trust in numerous online review studies, this suggests that personal characteristics may contribute to the way in which people read and comprehend online reviews.

Personal characteristics and personality traits influence who a person is and how they act; this will transfer over onto how they read. Yet, this area of online review research has not been considered prior. This thesis is aims to discover additional moderators to how people read and

comprehend online reviews in addition to the already research online review factors. The following personal characteristics will be measured and the reasons for this are discussed below.

2.5.1 Life Orientation Test

The Life Orientation Test describes a person's level of optimism. Optimists tend to make the best out of a situation or problem that arises; when a problem does arise, they tend to tackle them head on and actively try to better their situations (Scheier & Carver, 1992). However, they are also able to accept the reality of complications when they do arise, rather than simply hoping they go away (Scheier & Carver, 1992). Optimism is connected with lower feelings of distress amongst people experiencing challenging time; optimists tend to have greater positive attitudes and lower fatalism attitudes (Scheier & Carver, 1992). Pessimists on the other hand tend to partake in avoidance coping tactics and have a higher chance of giving up efforts towards goal achievement than optimists (Scheier & Carver, 1992). From this, Scheier and Carver (1992) suggest that pessimism is not simply another word for depression. Overall, a pessimists experience of life is that it is more difficult and less controllable; optimists appear more involved in life and try to make the best of it (Scheier & Carver, 1992).

Optimism was chosen due to the expectation that it may transfer onto reading behaviour. It is expected it may transfer with optimists being more attracted to positive information or drawn to positively rated reviews. Optimists have a positive outlook on life, believing that good things will happen (Scheier & Carver, 1985). This may transfer over to how they read in that they may feel that reading all of the information will give them the information they require to make a purchase decision, without the need to search out certain information.

2.5.2 Analysis-Holism Scale

The Analysis-Holism Scale was identifies the thinking style of participants; to classify them as analytic or holistic thinkers in order to assess whether thinking style can influence the way a person reads. Holistic thinkers tend to view context or area (field) as a whole. They are attentive to relationships between focal objects and the field and prefer to use these relationships to explain and forecast events (Nisbett, Peng, Choi, & Norenzayan, 2001). Holistic thinkers have a tendency to try and understand the general meaning of things; the essence of an idea or field, rather than dismantle it and focus on details (Dewey, 2007). An holistic approach sees an emphasis on change, multiple perspectives a must and an ability to recognise contradictions (Nisbett et al., 2001). Overall, holistic thinkers tend to look at the "big picture" or the context as a whole (Dewey, 2007).

Analytic thinkers, on the other hand, tend to focus on specific attributes. They separate the object from the context, focussing on the objects attributes and categorising them (Nisbett et al., 2001). Analytic people focus on specific parts of a context or area and how these individual

parts work together. Overall, analytic thinkers decontextualize structure from content, use formal logic and avoid contradiction in the way they think and understand (Nisbett et al., 2001).

Analytic versus holistic thinking could reveal whether reading styles reflect thinking styles. In other words, it will reveal whether analytic thinkers reading analytically and are holistic thinkers reading holistically. Analytic and holistic thinkers analyse and understand the world in quite different ways; this is expected to transfer into the way they read. Holistic people like to gain an understanding of the overall situation; the get the 'gist' of what is happening (Choi, Koo, & Choi, 2007; Dewey, 2007). It is expected these readers will look at a variety of different online review factors, especially the likes of photos and ratings, which will help them gain the general idea of what is being reviewed. In contrast, analytic thinkers tend to focus on few key characteristics (Choi et al., 2007; Dewey, 2007); it is expected they will gaze at less online review factors, rather focussing on a few key factors.

2.5.3 Need to Evaluate Scale

The Need to Evaluate Scale explains a person's evaluative tendencies. Compared to those who rate lower in their need to evaluate, those high in their need to evaluate are more likely to describe in evaluative terms and engage in evaluative thought (Jarvis & Petty, 1996). As such, this scale allows us to see how evaluative an individual is, which becomes a useful tool in regards to how useful they may find evaluative tools such as online reviews. The need to evaluate was chosen as a measure due to its impact on online reviews. Online reviews reflect an evaluative form of writing; a person's need to evaluate, if it is higher, could influence the reading of more online reviews. Unfamiliar content is evaluated greater by those with higher needs to evaluate (Jarvis & Petty, 1996); this may come into play with this study as the information given to participants to read is unfamiliar to them. This could lead to an increase in the participants need to evaluate.

2.5.4 Ten-Item Personality Inventory

The Big-Five framework hierarchical in nature and incorporates measures of extraversion, agreeableness, conscientiousness, emotional stability and openness to new experiences (Gosling, Rentfrow, & Swann, 2003). These personal characteristics describe personality at a broad level and are represented in the scale as bipolar measures with each trait summarising several more precise features, of which represent even more specific personal characteristics (Gosling et al., 2003). This scale, and all of its traits, was used in order to explain what traits are important to each participant. This would then determine whether they type of person, and their outlook on life, is influential on how they read online reviews.

The ten-item personality inventory covers the big five personality factors in a brief way. This allows for information to be gathered as to whether personality traits have an influence on the reading of online reviews; for example, as to whether extraversion favours opinionated or

unbalanced reviews or whether agreeableness relates to less contradiction in reading and therefore less time reading. Openness to new experiences may see differing reviews read to fully understand the experience had by the writer

2.5.5 Personal Involvement Inventory

Zaichkowsky's (1994) revised two-dimensional personal involvement scale is can investigate a participants' involvement with online reviews. This scale was conceptualised as a context-free measure which can be used to research product, advertisement and purchase situation involvement (Zaichkowsky, 1994). This could be used to look into the involvement a person feels with online reviews; this scale could determine whether they involved themselves with the platform of reading. People can comprehend what they are reading better if they have prior knowledge on what they are reading (Rapp, 2008). For this study, greater knowledge about online reviews may see people more involved in what they are reading and comprehending the information better due to the format (i.e. online reviews) by which it is presented.

2.5.6 Philosophies of Human Nature Scale – DispositionalTrust

The trustworthiness dimension of the Philosophies of Human Nature scale looks into whether a person is essentially trustworthy, honest, moral and responsible (L.S. Wrightsman, 1974). Dispositional trust, specifically, has influence upon decision contexts (Rose, Rose, & Dibben, 2010; L.S. Wrightsman, 1974). Those with higher levels of dispositional trust tend to consistently trust other people across differing situations and contexts (Rose et al., 2010). This type of trust is a personality trait of which a person brings to all situations and is both essential and static (Rose et al., 2010; L.S. Wrightsman, 1974). Trust-based theories generally show that those who have high levels of trust accept as trust that other people are always trustworthy no matter the situation (Rose et al., 2010; L.S. Wrightsman, 1974, 1991). This suggests that those with higher levels of trust are less likely to believe that other individuals are incentivised to be dishonest (Rose et al., 2010; L.S. Wrightsman, 1974). This has significant implications for online review readers and writers; those with higher levels of trust reading an online review would assume that the online review written is written honestly and without incentive.

Finally, measuring dispositional trust allows for insight into whether readers trust in people transfers onto the online review content. Online reviews are a form of eWOM which, I ike traditional WOM, is a generally highly trusted source of information (Dichter, 1966). Dispositional trust looks into the trust a person has in other people (L. S. Wrightsman, 1964). This could influence whether an online review reader gazes at the source of the review; likely if they have lower trust they will look at the source of the review in order to determine whether the review content can be trusted or that the reviewer is worthy of their trust. Higher dispositional

trust levels could see more gazes focussed on the content of the reviews with the reader trusting the content is written by a trustworthy reviewer.

2.6 Summary

This literature review covers three key areas of research: eWOM (viewed as an extension of WOM), online review specific research and how people read. Together, these three area form a basis for online review specific research; online reviews are a written form of eWOM.

For the purpose of this study, eWOM is viewed as an extension to tradition WOM communication. It shares similar aspects to tradition WOM with the addition of an electronic platform with electronic communication. WOM and eWOM are an important marketing tool that is oftentimes not able to be controlled by marketers. In particular for eWOM, its reach is far greater than that of WOM. As this form of communication is trusted by consumers for its apparent truthfulness, marketers need to start managing eWOM as best they can; whether that be encouraging positive eWOM or effectively responding to or rectifying negative eWOM. For this reason, it is essential it is continued to be researched and understood.

Online reviews, as a specific tool of eWOM, have already started to be explored in research. Although this body of research is small in relation to marketing literature as a whole, it is becoming more important. With many specific online review websites being created, and with more online stores appearing that incorporate online reviews, the more marketers know about them the better. Numerous specific components of online reviews have already been researched; be that ratings, reviewers or usefulness to name a few. What this area of research is lacking is research looking at online reviews as a whole; how all of the components work together.

Finally, research into how people read spans decades. Because of the size of this area of research, this literature review focussed on screen-based reading and eye-tracking specifically. Along with our entry into a digital age, our reading behaviour has reflected this change and become more screen-based. As such, research into reading patterns should take into account this change and begin to include reading via electronic platforms or screens. Eye-tracking has also become a more popular form of research as it has lowered in cost and become easier to use.

2.6.1 The Expected Influence of these Characteristics

In looking at all of the prior discussed online review characteristics, it is apparent that they all could influence the way in which online reviews are read. For one, the reasons as to why and the results of engaging in eWOM could contribute to the way in which online review are read. A person reading online reviews does so because they are looking for a more trusted and less marketer driven source of information; they are searching for eWOM. If a person is searching for

reasons as to why not use a product or service, for example, they may actively focus on the negative reviews or information presented. The same could occur in the case of searching for reasons as to why use a certain product or service.

Past research in the online review area focusses largely on experiments presenting one manipulated review. In these cases people may feel forced to read and, as a consequence, read less naturally. This study looks into how people actually scan and read the online reviews and this may find clues for future studies in regards to the way in which and what influences these more natural reading behaviours. To look more specifically at online reviews, the actual review content characteristics could influence how the reviews are read. The balance and sequence of the review set, as presented on the online review website, can influence how the reviews are read and perceived. An unbalanced set of reviews presented as either a positive or negative wrap would be perceived as more useful to readers; a balanced set would be perceived as less useful. Having an individual review star rating can also influence readers with review valence and volume influencing trust and quality associations respectively. Likewise the actual content written by reviewers' influences the review usefulness, with more detailed reviews viewed as more useful; thus attracting readers. Finally, the reviewer or source effects how the information presented in the review is perceived, with the credibility of the source influencing positive review expectations.

Lastly, reading behaviours, be that based of traditional reading or screen-based, could influence how online reviews specifically are read. The traditional Western way of reading (left to right, top to bottom) is expected to transfer onto online review reading. It would not be uncommon for readers to go through the online review website in this way; in a top to bottom order. Likewise, the current increasing use of screen-based reading is likely to transfer onto the reading of online reviews. The likes of font size and type and scrolling behaviours are expected to influence the reading of reviews; smaller font size requiring more focus (larger font size seeing less focus) and scrolling and reading speed being intertwined.

2.6.2 Research Questions

Together, these three areas of research form the basis for my research questions and proposed study. There is a gap in research to incorporate all of the different components of online reviews into a study; to investigate online reviews as a whole. No research has been conducted as to how all of the review characteristics influence how people read or how individual characteristics have influence. It is also apparent that, in accordance with our continuously developing screen-based reading behaviour, that research needs to look into reading patterns of specific online-based reading platforms. As such I propose the following research questions:

RQ 1. How do the different online review factors work together?

This question looks at where people are initially looking and the importance of review characteristics. It investigates how all the differing review content and review website

characteristics interplay with one another. The different review factors which were inputted into the design of the online review website used in this study reflect the findings of past research. These factors, as discussed in section 2.3, are found to be influential or useful to online review readers. These review factors have largely been studied separately in past research; this study looks to investigate them together and identify what it is readers truly focus on in a more natural or real online review website setting.

RQ 2. How does the liking of reviews and actual gazing compare?

This looks into whether what people are identifying as liking and disliking coincides with where they are gazing. This question sees online review measures interplay with eye-gazing or reading measures. Comparing which online reviews readers identify as liking and disliking with their eye-gazing patterns will show whether readers are consciously aware of what it is they are reading. It will determine whether people read all reviews in order to create an opinion as to liked and disliked information; or whether people do not read reviews they dislike from the outset. The eye-tracking data will support the questionnaire findings in the sense that eye-gazing behaviour can be subconscious and reveal what is truly being read; whether readers identify with that or not.

RQ 3. How do individual characteristics affect reading and the influence of reviews?

This looks at the personality and individual characteristics questionnaire and how this relates to peoples gaze behaviour. This question relates to literature on how people read (section 2.4) and on online reviews in general (section 2.3). This research questions takes the ideas found in past research regarding the differing reading behaviours of people, especially in regards to computer- or screen-based reading, and the online review factors already found to be of importance to readers and attempts to further the understanding as to why people read these areas of online reviews. It addresses the gap in literature regarding why it is people read online reviews and it's differing factors in certain ways and attempts to discover whether it is due to the personal differences of the reader.

3. Methodology

This study takes on an exploratory, mixed method and inductive design. This chapter discusses, in depth, the design, measures, sample and procedure taken when conducting the research. This chapter also covers the research objectives investigated and the ethical considerations that were acknowledged during this study.

3.1 Research Design

The design of this research was both inductive and mixed method but in one study; qualitative research followed by quantitative research. It is inductive as the we are building themes from the bottom up and we need to look back and forth between themes and our database of information until a comprehensive set of themes is created (Creswell, 2013).

A mixed method design was chosen so as to increase our understanding on the results gained in the initial qualitative study. The qualitative and quantitative approaches each focus on a different phenomenon (Sale, Lohfeld, & Brazil, 2002); qualitative focusing on reading patterns and quantitative on individual characteristics and personality traits. The distinction of phenomenon in mixed methods is said to be crucial to the use of mixed methods (Sale et al., 2002). A mixed method approach to research allows for the likes of words and pictures to further explain numbers; likewise numbers can be used to add exactness to words and pictures (Burke Johnson & Onwuegbuzie, 2004). Thus, mixed methods is suited to this research due to it investigating to distinct and key phenomena (reading patterns and personality) and how they interact with one another; using both quantitative and qualitative research allows for further explanation to be gained as to why any reading patterns exist.

This was an explorative study; as there was little information surrounding the topic this study helped gain preliminary information that helps with defining problems (Kotler, Adam, Brown, & Armstrong, 2003). An explorative method is appropriate in situations where there is a rather broadly defined problem or the general nature of a problem is being investigated (Dibb, Simkin, Pride, & Ferrell, 2006; Silver, Stevens, Wrenn, & Loudon, 2013); such as is the case in this study. This study defines a broad problem; to investigate how it is people read online reviews and what influences this behaviour. This method allows for some flexibility in exploring the problem and it is used to generate, rather than test, hypotheses (Silver et al., 2013). The following section is broken into these two aspects to discuss in depth the design of both the qualitative aspect and then the quantitative aspect; the order in which they occurred during the actual study.

3.1.1 Eye-Tracking

Eye-tracking was chosen as the tool to measure how people read online reviews. Eye-tracking has been used comprehensively in research on reading when discourse processes are being studied (Anson & Schwegler, 2012). This research tool generates accurate representations of how and what people are reading and has already led to important alterations to existing fluent reading process models (Anson & Schwegler, 2012). Eye-tracking and its ability to illustrate where it is people are actually gazing exposes what is truly being read; be that conscious or subconscious. In other words, "the eyes don't lie" (Davenport & Beck, 2001) which makes eye-tracking an excellent tool to use when investigating how people read.

There are different eye-trackers which measure eye movement in numerous different ways. For this study, the Grinbath EyeGuide Tracker was used. This eye-tracker is a complete system; reliable, versatile and full-featured (Wong, 2011). It is lightweight and has an adjustable headband that can be adjusted to fit almost any user. As such it is unobtrusive, easy to calibrate and comfortable for participants to wear, in turn allowing for a more realistic experience with the focus not solely placed on what the participant is wearing on their head; rather allowing participants to focus easier on what they are gazing at. The EyeGuide system allows for time on task and time-to-first-fixation to be gathered and the data is able to be displayed graphically or through other key visualisations: replays, heat maps, gaze plots, clusters and bee swarms (Wong, 2011). This eye-tracking system records 50 frames per second and also records the x and y gaze coordinates; something which can be used to later re-plot the gaze coordinates onto a graph.

As per the literature review, eye movements which are indicators of visual behaviour that are used in the eye-tracking method include fixations, saccades and scan paths. Fixations are stable gaze in a specific area that lasts approximately 200-300 milliseconds (Granka, Joachims, & Gay, 2004). During fixations, information is gained and processed (Granka et al., 2004). Saccades on the other hand are ballistic in nature and somewhat repetitive in their movement patterns (Duchowski, 2007). The pattern that fixations and saccades create is known as a scanpath (Noton & Stark, 1971); the eye-tracker picks up on these eye movements and records them.

3.1.1.1. Eye-Tracking Design

The eye-tracking study in this research focused on the reading of online reviews and online review factors. A blog website was also read, however this was not the focus of the study. The blog reading exercise was included to camouflage the main focus of the study; the online review reading activity. The travel industry was used as a topic of focus with a specific focus on hotels. This is because travel is something gender neutral and somewhat relatable to and understood by all. A fake hotel in a location which was highly unlikely to have been visited by New Zealand students (Myrtle Beach, South Carolina, USA) was the basis for the online review website created so as prior knowledge could not influence the data. As prior knowledge influences

reading comprehension in that incorrect information takes longer to read (Rapp, 2008), having prior knowledge on a hotel could have influence on the reading times, speeds or patterns of the participants.

The online review website consisted of eight online reviews that were based off real online reviews but adapted to ensure no potentially harmful, personal or recognisable content was included. These eight reviews were all formatted and written differently: some were short whilst some were long; some contained paragraphs whilst others were written as one solid paragraph; some contained responses from the hotel management; some contained hotel photographs; different star ratings were given with some angled as negative reviews, some positive and some neutral; different reviewers were identified with some being shown as experts whilst others simply shown as reviewers, some gave real names and others aliases and different reviewer photos were used; finally, differing levels of review helpfulness were identified. These aspects can be seen in Figure 1 below; the full webpage with all online reviews can be seen further in depth in Appendix 1. These differences were based off components of online reviews that have been researched previously and found to be noticed by and have influence on readers (as discussed in chapter 2).

The online review website was designed to reflect that of other online review websites and included often used online review factors. This includes having a header picture, webpage tabs, hotel photos supplied by the hotel, hotel summary with key statistics summarising all reviews and 'Also In The Area' section to show other places nearby. This design and layout can be seen in Figure 1 below and Appendix 1. This webpage was scrollable but not clickable. Making the webpage scrollable, despite making it more difficult to analyse, made it more realistic and allowed for us to see how it is people read online review websites as if they were in a real situation.

The design of this website includes key factors identified in past literature as having an influence on online review readers. These are discussed in depth in section 2.3. This includes the balance and sequence of online reviews; with the design reflecting a mild 'positive wrap'. This design include a more balanced set of online review; despite unbalanced sets being less helpful than balanced sets (Purnawirawan et al., 2012), this study is not looking for entice readers to identify helpful reviews rather it is looking into their reading behaviour. Multiple reviews were included for this study's website due do the ratings volume signalling trust and quality (Flanagin & Metzger, 2013; Yang & Mai, 2010) and to make the website more reflective of a real online review website.

The individual review star rating was included for each review was inputted to acknowledge the importance of review valence on online review readers. The actual review content as varied in its information depth with differences in the review content being related to differences in reader perceptions of the review (Willemsen et al., 2009). The source of each individual review (the reviewer) was included with varying levels of expertise identified as well as a variety of different names give; a mix of real names and aliases. This is because of the positive expectations and trustworthiness that can be associated with the source and their expertise in online reviewing

(Flanagin & Metzger, 2013; R. Zhang & Tran, 2010). Summary statistics were also included due to the prior research done on this area; despite findings suggesting readers do not rely on the summary statistics alone (Chevalier & Mayzlin, 2006), the large majority of online review websites include an overall summary statistics area which gives our developed website a more realistic feel. These past found online review factors have an influence in some way on readers of online reviews. They are also all a part of the majority of online review websites. Thus, with the addition of hotel photos and an 'Also In The Area' section, these factors reflect a real online review website to make the reading experience more natural for online review readers.

MyTravelReview.com ATTRACTIONS RESTAURANTS BEST OF 2014 FLIGHTS TRENDING Hotel Anon **89%** Positive Ratings ##### Hotel //// 750 Reviews Myrtle Beach, South Carolina Photos Also in the area: Huge Apartment! We had the three bedroom apartment on the beach and we loved that there were inside and outside pools. The ocean view from our room was really nice and it was located on a The Beach Hotel private part of the beach and away from any other large hotels. The apartment was large John Smith and nicely furnished. The master suite had a king sized bed and the ensuite had a Jacuzzi tub. The TV did not work in the master suite but if didn't matter to us. The second bedroom had an ensuite and the third bedroom did not. The kitchen had the basics although it Hotel Holiday Top Reviewer didn't have a blender which would have been nice. We had to wait to get the staff's attention at the front desk all the time but we would still visit again. → 38 Reviews Myrtle Hotel 59 Helpful Votes 6 people found this review helpful Paradise Resort First Time in Myrtle Beach *** My husband and I stayed at Hotel Anon for a few days in early June. We arrived at 1pm and were able to check in early. We had a one bedroom suite on the 12th floor. The room Myrtle Beach Resort

Figure 1: Online Review Website Created

As well as an online review website, participants also read a blog on a similar topic. This was not for analysis purpose but so as participants were not aware that the experiment was solely looking into online reviews. The blog website was created to look visually similar to the online review website with the main difference being the blog layout and content.

The blog content was based in the same location as the online reviews (Myrtle Beach, South Carolina, USA) and followed the travel theme. Like the online reviews, the source was identified and further described as per standard blog websites. The blog website included photos and different length blog posts surrounding the fictitious family's travels in Myrtle Beach and experience at the same hotel reviewed in the online review website. The design reflected that of

the online review website, with a header image, blog title and subtitle, source and date for each post and right-hand sidebar describing the blog and blog author. This can be seen below in Figure 2; the entire blog website can be viewed in Appendix 2.

Figure 2: Blog Website Created



The Smith Family Travels

Our family vacation around the USA



Leaving SC

We have officially hit the half-way point in our road trip around America!! Crazy to think how time flies. Just a quick stop for lunch and then back on the road for a while. For our first time in South Carolina, it wasn't bad – but like anything there is definitely room for improvement.

Despite the hotel being pretty good for most of the trip, Hotel Anon was a bit of a pain to check out of — especially when you are toting around two inflable children who really want to get on the road to Disney World. Firstly, the front desk staft. Wow. And not in the good sense. Where the lady who checked us in was fabulous, the man on the front desk when we were checking out was rude. You could tell he just really did not want to be there. I waited in front of him for what fell like five minutes (was probably more like two though) before he even looked up from his computer. And then he tried to charge us for calls we did not make! We have cell phones that we use for that reason! Turns out he was looking up the wrong guest. And didn't even apologise. Sadly, this was a bad ending to what was a reasonably good trip! Just wish Hotel Anon had good staff on ALL the time.

Then don't get me started on the parking garage. We thought it was tight when we arrived and attempting to unpack the car. Well leaving was even worse – was like a garne of twister trying to pack the car and not hit the cars next to us. Cranky kids. Cranky husband. And then I return from the front desk cranky also.

Now we hit the road again. Next stop Florida and the much anticipated Disney World!



3.1.2 Survey

The eye-tracking experiment was followed by an online survey which aimed to gain information about the participant's individual characteristics, personality and views on online review factors. This survey was made up of differing individual characteristic and personality scales in order to help cluster participants.

3.1.2.1 Survey Development

The survey was created using differing personality and individual characteristics scales and implemented on Qualtrics online. An online survey was chosen as the way to implement this due to its ability to ensure all questions were answered and for ease of analysis. Online questionnaires also provide a clean design and also allowed us to include questions which needed clear pictures of our prior-used online reviews. It is for these reasons that this survey

method was chosen; ease of implementation and ease of analysis. As discussed in section 2.6, personal characteristics have yet to be researched in regards to reading online reviews. In accordance with this section, several individual characteristic measures were chosen. These were chosen due to their ability to be measured and prominence in everyday life and decision making which makes them more likely to have influence on reading behaviour.

The survey used after the eye-tracking experiment assessed individual characteristics and personality types. This survey measured the following: participants' life orientation using the Life Orientation Scale (Scheier & Carver, 1985); thinking styles using the Analysis-Holism Scale (Choi et al., 2007); Need to Evaluate (Jarvis & Petty, 1996); personality using the Ten-Item Personality Inventory (Gosling et al., 2003); Product Involvement (Zaichkowsky, 1994); and Dispositional Trust (L. S. Wrightsman, 1964). Each of these scales are reputable and measure differing aspects of the participant.

Life Orientation Test

The first scale used in the survey was that of Scheier and Carver's (1985) Life Orientation Test. This 12-item scale consists of eight questions (four positively worded and four negatively worded) and four filler questions (Scheier & Carver, 1985). With its conceptual roots in psychology, this scale is seen to be a comprehensive measure of optimism, or outcome expectancy favourability (Scheier & Carver, 1985). This scale has a sufficient level of internal consistency, test-retest reliability and predictive, convergent and discriminant validity (Scheier & Carver, 1985; Scheier, Carver, & Bridges, 1994). As such, the Life Orientation Test is a feasible tool or scale in which to assess general optimism; dispositional optimism (Scheier & Carver, 1985; Scheier et al., 1994). This scale was used to measure the optimism level of participants to determine whether they had a positive or more negative outlook on life.

Analytic Versus Holistic Thinking

The second scale used is that of Analysis-Holism Scale by Choi, Koo and Choi (2007) which measures analytic versus holistic thinking. This scale looks to encapsulate cultural thinking style differences; comparable to that of individualism and collectivism (Choi et al., 2007). Certain key characteristics of this scale can be used to represent thinking style sub-dimensions: locus of attention; causality or interactionism versus dispositionism; perception of change, be that cyclic or linear; and attitude towards contradictions or naïve dialecticism versus formal logic (Choi et al., 2007). This scale uses questions with represent each of these four characteristics of thinking styles and is used in this study to determine the thinking style of participants.

Need to Evaluate

The next scale used was that of Jarvis and Petty's (1996) Need to Evaluate scale. This scale looks into differences in the individual as to their tendency to evaluate. This scale was developed from the hypothesis that some people constantly participate in evaluative reactions; more so than other people (Jarvis & Petty, 1996). It is apparent from the five studies conducted that this is in fact true. The Need to Evaluate scale has been found to be a reliable tool to measure differences between individuals; convergent and discriminant validity of the scale was supported and predictive validity both demonstrated and replicated (Jarvis & Petty, 1996). This scale was used in order to measure participant tendency to evaluate situations. This is relevant due to the nature of online reviews being an evaluative information platform.

Personality

The Big Five Personality measure was used to study personality; specifically the ten-item inventory. This scale measures of extraversion, agreeableness, conscientiousness, emotional stability and openness to new experiences (Gosling et al., 2003). Despite not being quite as thorough as standard multi-item measures, both the five- and ten-item inventories are adequate in regards to convergent validity, discriminant validity, test-retest reliability, external correlate patterns and self- and observer-ratings convergence (Gosling et al., 2003). There have been several ways developed in the past to measure the Big-Five dimensions, however they are all reasonably lengthy or time consuming to initiate. The ten-item inventory of the Big-Five Personality dimensions is a great alternative in situations where a shorter measure is needed (Gosling et al., 2003); such as in this case in regards to measuring numerous individual characteristics within one survey.

Personal Involvement Inventory

A personal involvement inventory was also taken within the survey of this study; specifically Zaichkowsky's (1994) revised two-dimensional personal involvement scale. This scale was conceptualised as a context-free measure which can be used to research product, advertisement and purchase situation involvement. This revised scale reduced the prior, original scale from 20 items to 10 items (Zaichkowsky, 1994). This ten-item scale includes both an affective and a cognitive dimension. The affective dimension includes five measures: interesting, exciting, appealing, fascinating and involving. The cognitive dimension also includes five measures: important, relevant, means a lot to me, valuable and needed (Zaichkowsky, 1994). This scale was used to measure participant involvement with online reviews to determine whether they involved themselves with the platform of reading.

Dispositional Trust

Wrightsman's (1964, 1974) Philosophies of Human Nature Scale measures six characteristics which surround the way people are thought to behave: altruism, independence, strength of will and rationality, complexity of human nature, variability in human nature and trustworthiness. For the sake of this study, the trustworthiness dimension was focused on and used in the questionnaire. This scale is measured on a 6-point likert scale and the trustworthy dimension includes 14 statements that measure honesty and trust (L. S. Wrightsman, 1964; L.S. Wrightsman, 1991). This scale was used as online reviews as a form of eWOM are a generally trusted source of information. This scale allows for it to be seen whether a general trust in people prior to reading exists and whether this influences the reading of online reviews.

3.1.2.2 Survey Design

Table 4 below shows a table of the online survey questions used in this study. It states by whom the question or scale was sourced from, what it measures, the question number in regards to which question number on the online survey it was, the scale type (including number of items and scale range) and finally the specific survey items or questions used. The questionnaire as presented to participants in the online format can be seen in Appendix 3.

Table 4: Table of Survey Questions

Author	Scale & Measure	Question number	Scale Type	Questions
Scheier and	d Life Orientation Test. 2	2	12-item scale consisting	In uncertain times, I usually expect the best
Carver	Measures optimism		of eight questions (4	It's easy for me to relax
(1985)			positively and 4 negatively worded) and four filler questions. Measured on a 5-point Likert scale ranging from strongly disagree to strongly agree.	If something can go wrong for me, it will **
				I always look on the bright side of things
				I'm always optimistic about my future
				I enjoy my friends a lot
				It's important for me to keep busy
				I hardly ever expect things to go my way **
				Things never work out the way I want them to **
				I don't get upset too easily
				I'm a believer in the idea that "every cloud has a silver lining"
				I rarely count on good things happening to me **
Gosling,	•	3	10-item brief measure of Big-Five personality dimensions on a 7-point Likert scale, ranging from strongly disagree to strongly agree.	I see myself as: Extraverted, enthusiastic
Rentfrow and Swann	inventories	personality brief measure Five y dimensions ion, ness, ousness, stability and		I see myself as: Critical, quarrelsome **
(2003)	Ten-item personality scale is a brief measure			I see myself as: Dependable, self-disciplined
(====)	of the Big Five			I see myself as: Anxious, easily upset **
	personality dimensions			I see myself as: Open to new experiences, complex
	(extraversion,			I see myself as: Reserved, quiet **
	agreeableness, conscientiousness,			I see myself as: Sympathetic, warm
	emotional stability and			I see myself as: Disorganized, careless **
	openness to experience).			I see myself as: Calm, emotionally stable
				I see myself as: Conventional, uncreative **
Choi, Koo &	Analysis-Holism Scale	4	24-item scale separated	Everything in the universe is somehow related to one another
	Measures analytic versus holistic thinking		contradictions, perception of change, locus of attention) each with 6 items. Measured on a 7-	Even a small change in any element of the universe can lead to significant alterations in other elements
				When disagreement exists among people, they should search for ways to compromise and embrace everyone's opinions
				Choosing a middle ground in an agreement should be avoided **
				An individual who is currently honest will stay honest in the future **

			from strongly disagree to strongly agree. For the sake of this questionnaire, 8 items were used; 2 from each factor including one reverse coded item in each factor where possible.	Current situations can change at any time It is more important to pay attention to the whole context rather than the details We should consider the situation a person is faced with, as well as his/her personality, in order to understand ones behaviour
Jarvis & Petty (1996)	Need to Evaluate scale Measures individual preferences in regards to the propensity to engage in evaluation.	5	16-item scale on a 5-point Likert scale ranging from extremely uncharacteristic to extremely characteristic. These are summed to form a score which ranges between 16 and 80.	I form opinions about everything I prefer to avoid taking extreme opinion ** It is very important to me to hold strong opinions I want to know exactly what is good and bad about everything I often prefer to remain neutral about complex issues ** If something does not affect me, I do not usually determine if it is good or bad ** I enjoy strongly liking and disliking new things There are many things for which I do not have a preference ** It bothers me to remain neutral ** I like to have strong opinions even when I am not personally involved I have many more opinions than the average person I would rather have a strong opinion than no opinion than no opinion at all I pay a lot of attention to whether things are good or bad I only form strong opinions when I have to ** I like to decide that new things are really good or really bad I am pretty much indifferent to many important issues **
N/A	Identifies which review/s participants state as liking the most/least	6	Selection by clicking once on the review they liked the most, and/or twice on the review they liked the least	What was the most useful review from the eye tracking exercise?
Zaichkowsk y (1994)	Personal Involvement Inventory Revised two-dimensional scale which improved the prior unidimensional	7	10-item scale measured on a 7-point scale using polar adjectives. These can then be summed to form a score ranging	When making travel plans, online reviews are: Important Unimportant ** Boring Interesting Relevant Irrelevant **

	1985 scale by reducing the 20-item scale to 10-items. Provides a context-free measure which can be applied to product, advertisement and purchase situation involvement.		from 10 to 70 with 10 being the anchor for low involvement, 40 being the midpoint and 70 being high involvement.	Exciting Unexciting ** Means nothing Means a lot to me Appealing Unappealing ** Fascinating Mundane ** Worthless Valuable Involving Uninvolving ** Not needed Needed
Wrightsman (1964,1974)	Philosophies of Human Nature scale Measures six behaviour-based characteristics: altruism, independence, strength of will and rationality, complexity of human nature, variability in human nature and trustworthiness. For the sake of this study, the trustworthiness dimension was focused on and used in the questionnaire.	8	Trustworthiness dimension includes 14 items measuring honesty and trust on a 6-point Likert scale ranging from strongly disagree to strong agree.	Most students will tell the instructor when he or she had made a mistake in adding up their score, even if the instructor had given them more points than they deserved. If you give the average person a job to do and leave him or her to do it, the person will finish it successfully People claim they have ethical standards regarding honesty and morality, but few people stick to them when the chips are down ** If you want people to do a job right, you should explain things to them in great detail and supervise them closely ** People usually tell the truth, even when they know they would be better off lying Most students do not cheat when taking an exam If most people could get into a movie without paying and be sure they were not seen, they would do it ** Most people are not really honest for a desirable reason; they're afraid of getting caught ** Most people are basically honest Most people would tell a lie if they could gain by it ** If you act in good faith with people, almost all of them will reciprocate with fairness towards you Most people lead clean, decent lives Most people would cheat on their income tax if they had a chance ** Nowadays people commit a lot of crimes and sins that no one else ever hears about **
N/A	Allows for participants to identify what information they find as important when reading online reviews	9	Open-ended question	When reading online reviews, what things influence your decision about the product or service being reviewed?
N/A	Measures what	10	8 items on 7 point Likert	When reading online reviews, how important are the following factors:

	participants identify as important factors when reading online reviews		scale ranging from unimportant to important	The rating The review is consistent with other reviews The review is consistent within itself Experiences Length Reviewer expertise Argument density (more arguments to back up opinions or evaluations) Argument diversity (diversity of positive and negative arguments in the review)
N/A	Find out participant gender for classification purposes	11	Categories	Sex: Male Female Prefer not to answer
N/A	Find out participant age for classification purposes	12	Open-ended	Age:
N/A	Find out participant education level for classification purposes	13	Categories	Highest education level: High school diploma Tertiary – certificate or diploma Undergraduate degree Postgraduate degree
N/A	Find out whether participant usually reads online reviews before making a purchase decision	14	Categories	Do you read online reviews when making a decision to purchase a product or service? Yes – often Yes – sometimes No – never

^{**}Item reverse scored

3.2 Sample

The sample consisted of 30 people; undergraduate and postgraduate students and university employees. The sample had an age range between 18 and 44; an average age of 23.5; and a median age of 23. Students and university employees were targeted due to the likelihood of English being a fluent language that they would both speak and read. The sample had all at some stage read online reviews; be that only sometimes or frequently. Thus, this sample fits the study as they represent the current increase in online review use.

Advertisements were sent out to be displayed and mentioned to students in marketing classes at Auckland University of Technology (AUT) as well as displayed in the business school lifts. To be included in the study, participants needed to be able to read English and to be able to read without wearing glasses. This exclusion was quite simply because the eye-tracking device could not pick up eye movement accurately when participants are wearing glasses. AUT ethics committee granted approval of this study to commence (see Appendix 7) with the eye-tracking device being non-evasive, antibacterial wipes used and the exclusion of people wearing glasses being justified.

Participants responded to the studies advertisements via email and were sent an information sheet about the study. If they then meet the participant requirements and were willing to participate in the study they were able to book a time to participate. Participants took part in the study at the AUT Marketing, Advertising, Retailing and Sales (MARS) departments' postgraduate laboratory. This location was chosen due to its accessibility to the chosen sample and due to the technology required for the eye-tracking device. This study took place between July 28, 2014 and October 4, 2014.

The sample was observed via the eye-tracking device; this device recorded their eye movements, not them themselves. The questionnaire was not observed. Participants were also only identified by an identification number they had chosen; they were not identified by their name nor were any data stored under their name. The eye-tracking portion of the study took on average 245.56 seconds (4 minutes and 5.56 seconds); a median of 202.80 seconds (3 minutes and 22.80 seconds) with a minimum time of 64.86 seconds (1 minutes and 4.86 seconds) and a maximum time of 685.36 seconds (11 minutes and 25.36 seconds). The online questionnaire took on average 1133.80 seconds (18 minutes and 53.80 seconds); a median of 1078.00 seconds (17 minutes and 58.00 seconds) with a minimum of 480 seconds (8 minutes) and a maximum of 2040 seconds (34 minutes). At the conclusion of their participation, participants were given a ten dollar Westfield mall voucher for their time.

During data analysis, two participants needed to be excluded. This is because their eye-tracking data was not sufficient as the device was likely moved or disconnected during data collection. Thus little eye-tracking data was collected for these two participants. This gives a final sample size of 28 participants.

3.3 Research Procedures

Participants were invited to take part in the study through in-class advertising as well as print advertising in the business school elevators at AUT, as seen in Appendix 4. Any person interested in partaking in the study emailed a dedicated email address created for the study. These persons were then emailed back an information sheet (see Appendix 5) to read through and if the met the criteria (i.e. they did not need to wear glasses for reading) they were able to book a time online to come into the AUT MARS postgraduate laboratory to participate in the study. This allowed for participants to choose a time convenient to them as well as a location in the place of their study.

When participants came into the laboratory to partake in the study, they were first told what the was the study involved and then asked to sign a consent form (see Appendix 6) if they were happy to participate. Once this was done, participants were asked to choose a number between 1 and 50 as an identification number so as no information would be saved under their names whilst still allowing for the questionnaire and eye-tracking data to be linked. Participants were only made aware that this was a study about online content; not that this study was specifically looking at online reviews.

Next, participants were told about and fitted with the Grinbath eye-tracking device, as seen in Figure 3. The eye-tracking device was also sanitised using an anti-bacterial wipe in front of the



Figure 3: Participant Fitted with Grinbath Eye-tracker

Permission given by model to use photo

participant so as they were aware the device was sanitised and therefore any health risks reduced. They were made aware that the device only recorded their eye-movements and the screen; that no identifiable information would be recorded. The device was then calibrated as accurately as possible; when this was reached the device was set and ready to record the tasks.

Participants were then given a brief outline of the fictitious situation: that they were planning a vacation and researching online prior to booking a certain hotel. That in doing their background research they found an online review website about a hotel named "Hotel Anon" as well as a blog about the area. In their first eye-tracking task they were told to go through the website just as they normally would; they could scroll around the page but could not click on links. They were shown what to do once they had finished the online review task; how to end it and move onto the blog website (the second task). At no time were participants told that the second task (the blog website) was irrelevant to the study.

Once participants were aware of how to do the eye-tracking study, they were asked if they had any questions. If they did, they were answered; if not they were able to start the study. The participant was left alone in the laboratory whilst partaking in the eye-tracking; so as they were not influenced by the researcher and outside influences were minimised. This also allowed for a more natural setting for participants to gaze at the online review website as they would at home.

When both the online review and blog website had been looked over and the participant had ended the eye-tracking recording, the researcher re-entered the laboratory. The eye-tracking recording was saved in front of the participant using the identification number they had chosen. The eye-tracking device was then again sanitised using an anti-bacterial wipe before the participant was moved to another computer to complete the online questionnaire using Qualtrics. Participants were simply told to enter their identification number at the beginning of the questionnaire and then complete all questions as they went through the survey. The participant was left alone to complete this and told to ask any questions if they were not sure. Once the questionnaire was completed and saved, the participant was thanked very much for their time and given a ten dollar gift card to Westfield mall.

Both the eye-tracking and questionnaire data was save under the participants chosen identification number. This data was collated at the conclusion of data collection; the eye-tracking data run through Grinbath's analysis software using the replay function and the questionnaire data downloaded to SPSS. The eye-tracking data was coded by hand using the replay (playback of each participant's eye-movements) and the gaze plot data downloaded to Excel to recreate graphs of each participants gazes. The questionnaire data was downloaded to SPPS and analysed using ANOVA, clusters and classification trees. The questionnaire data was then combined with the eye-tracking coding data. With both the eye-tracking and questionnaire data combined, clusters or groups were identified.

The process was the same for all participants; the same order of events, they were all told the same instructions and all given the same content to observe and answer. There was only minor deception used in this study in that participants were not made aware that the study was

focussing specifically on online reviews; rather they were told that we were looking into online content generally. A laboratory setting was required for this study due to the nature of the eye-tracker used; specific software was required and this also ensures the same computer screen size was used for all participants. Laboratory settings also allow for more control over the experimental setting when compared to a field setting (Duchowski, 2007); distractions were minimised, settings in regards to the website and computer screen were controlled and ensured to be the same for all participants.

This method is the most suitable method for this study. The use of eye-tracking in reading-based studies has been done so widely and it provides a way to accurately illustrate what and how people are reading. This method exposes what is actually been read, whether that be conscious or subconscious; the likes of simply a survey question asking the same thing would only show what a participant is consciously looking at. However, the eye-tracking alone does not give insight into reasoning behind why people read or look where they do. This is where the mixed method approach becomes the most appropriate for this research. The addition of a survey to the eye-tracking method gives insight into the reasoning behind why people read online review websites in different ways. This mixed method approach answers the research questions and gives greater insight into how people read online reviews than the eye-tracking experiment or questionnaire could alone.

3.4 Ethical considerations

This study received AUT's Ethics Committee approval on 17 June, 2014 (Ethics application: 14/99 – see Appendix 7). This approval included that of the information sheet (see Appendix 5), consent form (see Appendix 6), observation protocol (see Appendix 8), eye-tracking websites (see Appendices 1 and 2), and questionnaire (see Appendix 3).

Ethical considerations were minor but important none-the-less. The only potential risk to participants involved sharing a single eye-tracking device. To eradicate this risk, the eye-tracking device was sanitised both before and after use by each participant using an anti-bacterial wipe. This wipe was also un-fragranced and sensitive so as not to irritate participants.

Online review and blog website content was fictitious and created by the researchers. The content was written based off real online reviews to reflect what real online reviews are written like, but fictitious and recreated by the researchers so as to control for any potentially harmful or upsetting content. As such, ethics approval was sought and gained for this content; ensuring that the content included for participants to read was of a suitable nature. Even so, participants were aware that they were able to stop the experiment at any time, with no detrimental effect to themselves; if that were to happen their data would be erased.

3.5 Summary

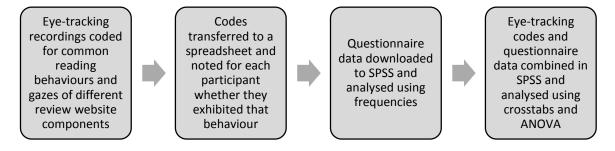
A mixed-method and inductive approach was chosen for this study so as to enable a full understanding as to how it is people read online reviews; an eye-tracking experiment of online reviews using the Grinbath eye-tracker followed by an online questionnaire using Qualtrics about individual characteristics. The initial eye-tracking study gives physical evidence as to how people physically read these online review websites; the following questionnaire helps to provide an explanation as to why it is people read online reviews in certain ways. Each participant followed the same sequence of events; the eye-tracking study (and associated set-up necessities) followed by the online questionnaire.

Analysis of Data

This study utilises a mixed method approach with a qualitative eye-tracking study followed by an online questionnaire. Both aspects of the study investigated different things; the eye-tracking looked into online review reading behaviour and the questionnaire investigated individual reader characteristics. These two aspects were studied so as the two data sets could be combined to determine whether the reader's characteristics have an influence on how they read online reviews. As such, differing analysis approaches were taken prior to the two sets of data being combined.

The eye-tracking data; recorded eye-movement recordings, were analysed using the Grinbath software. Specifically the replay function was used for coding manually and the gaze coordinates used for recreating gaze plot graphs to represent the computer screen. The questionnaire data was downloaded from Qualtrics into SPSS (version 22) and analysed using frequencies and descriptives (mean scores). The two sets of data were then combined to reveal whether individual reader characteristics have any influence on the way they read online reviews. Both sets of data; the coding and the questionnaire data, were put into SPSS and analysed using regression analysis. This allowed for data to be created which would answer the three research questions. The analysis process can be seen below in Figure 4.

Figure 4: Process of Analysis



4.1 RQ1: Review Factors

The eye-tracking data, having all been saved as individual videos under each participants unique identification number, was first downloaded to the Grinbath analysis software. The fixation details were set prior to analysis. These were set to a radius of 30 pixels for a minimum duration of 100ms. This is reflective of other eye-tracking studies including that of Porta et al. (2013). These settings are also defaulted by Grinbath in recommendation for their eye-trackers as well as being used in past eye-tracking literature.

The Grinbath software allows for differing analysis of the eye-tracking data: replay (straight play back of the gaze data), heat-map (hot spots of gazes on a stationary screen; does not take into

account scrolling of a page), gaze plot (line plot of gaze data on a stationary screen; does not take into account scrolling of a page), bee swarm (small point swarm of gaze data which allows of the scrolling of the webpage) and cluster (gaze data is clustered into key areas on a stationary screen; does not take into account scrolling of a page). As our data involved scrolling, only the replay and bee swarm analyses were appropriate as they allowed for scrolling to occur. Also what was used from this software is the simple downloading of the gaze data coordinates. This saw each coordinate for all gazes from each participant at 50 frames per second. Each participant's gaze information was downloaded and saved separately for later analysis.

The first analysis completed on the gaze data was manual coding. Each eye-tracking video was watched individually and coded in sequence what was occurring. A particiants gaze recording was played back via the replay analysis on the Grinbath software. Areas of the online review website (review factors) where the participant gazed was noted as well as any notable reading behaviour, such as scrolling behaviour. Examples of this were where the participant scrolled and read at the same time, when they stopped scrolling to read the reviews and when the scrolled the entire document prior to reading. These coding's for all participants can be seen in Appendix 9.

The written codes for each participants entire gaze video was then looked over for any interesting patterns and coded (as discussed above) as to whether participants looked at the commonly gazed at website areas or scrolling or reading techniques. The behaviours that were coded were common reading behaviours or patterns. Gazes onto the differing online review website factors were coded (e.g. looking at the hotel pictures or looking at the summary statistics) as well as the reading of the actual reviews (i.e. it was coded as to which reviews the participant read). Interesting reading behaviour was also noted, such as gazes back and forth between star ratings or sources. Along with these codes, gaze hit numbers were recorded from the gaze coordinate data and this was turned into percentage of total hits for each participant.

4.1.1 Coding Procedure

Available from the eye-tracking data (and as seen in Appendix 9) is that of how long participants spent on the reading task. It was found that our sample had a mean time of 244.25 seconds and a median of 202.8 seconds. This was with a minimum time of 64.86 seconds and a maximum of 685.36 seconds. Derived from the eye-tracking data were several codes (discussed below). These codes were run through SPSS to identify key frequencies (as seen in the SPSS outputs of Appendix 10) and for use in combing the eye-tracking data with the questionnaire data; the latter discussed in following sections.

Before the actual coding took place, a summary of the sequence of eye movements was noted down. Some interesting behaviours came about from looking at this simple replay of the eye-tracking video. Certain behaviours such as that of comparing reviews could be determined by looking at the eye-tracking replay videos. Participant 18, for example, read the first review, glanced at the second review, before looking at the second review's source to the first reviews

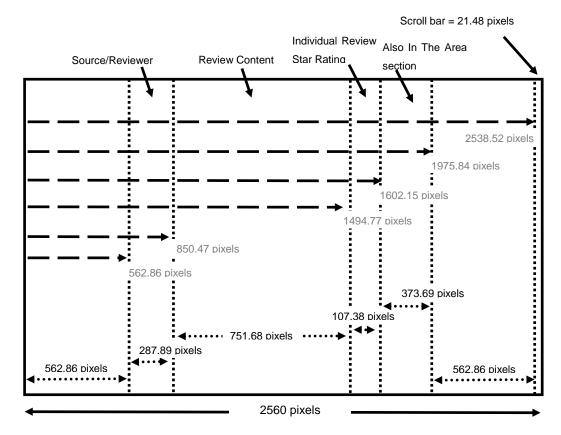
source and back to the second review's source. This shows that this reader, after reading the first review and glancing at the second, compared the two reviewers and their experience in writing reviews. This could potentially be due to review 1 and 2 being so different; review 1 was brief and review 2 longer and very detailed.

4.1.2 Gaze Plots of Eye-Tracking Data

The Grinbath software allowed for the downloading of the raw gaze plot data for each participant. This allowed for these x- and y-axis data to be plotted onto a graph to illustrate the key screen areas where each participant was looking. These graphs then saw the vertical axis reversed so as the graph then represented that of a computer screen; as per the eye-tracking data. All graphs of raw data for each participant can be viewed in Appendix 11. In looking at these graphs, it is apparent there are some commonalities. These have been identified as: content or reading focused, scattered or all-over gazing, reading in a sweep or curve and reading focussed on the top of the page.

Each vertical section of the online review website can be represented on the graph and is based off the computer pixel screen size of 2560x1440 pixels. These are along the x-axis with the reviewer or source area representing between approximately 562 pixels (x-axis) and 850 pixels (x-axis). Between 850 and 1495 pixels (x-axis) lies the bulk of the review content with the star rating and edge of the review content lying between 1495 and 1602 pixels (x-axis). The Also In The Area section, located in the top portion of the website is located between 1602 and 1976 pixels (x-axis). The remaining portions; less than 562 pixels (x-axis) and greater than 1976 pixels (x-axis) represent blank space bordering the website content. This is illustrated in Figure 5 Gazes that drift into this area, often towards the (0,0) coordinates in the top left corner usually represent when a participant blinks and the eye-tracker disconnected briefly as it loses contact between the eye and the eye-tracking camera. The graphs below have been resized to focus on the gaze patterns of solely the website content (between 562 and 1976 pixels).

Figure 5: Calculation of Online Review Website Areas Based on the Computer Screen Pixel Size



The most notable trait in many of the online review gaze data plots is that of reading the online review content. As seen below in Figures 6 and 7 for participants 18 and 01, a clear line surrounding along the beginning of the review content area can be seen. This shows that these particular participants were reading the online review content from left to right as per Westernised reading. There is a definite beginning to the reading pattern with the ending of sentences varying; potentially from differing sentence lengths or from the eyes drifting towards the end of the sentence. As seen in Figure 6 and 7, some eye-tracking data showed definitive beginnings of reading and little towards the end of the sentences. This could be attributed to scanning of the content rather than thorough reading.

This gaze plot illustrates the importance of review content. This area sees the bulk of gazes and reflects the reason as to why readers visit online review websites. As identified in Figures 6 and 7, there are clear indications of where these readers start reading the online reviews at the beginning of each line. These readers are content-heavy; they are searching for the rich, indepth information that they can gain from reading the online reviews. This has implications for online review website developers and marketers alike; online review templates should encourage in-depth review information rather than focusing on summary statistics for both the overall and individual reviews.

Figure 6: Illustrated Example of Reading from Eye-Tracking Experiment

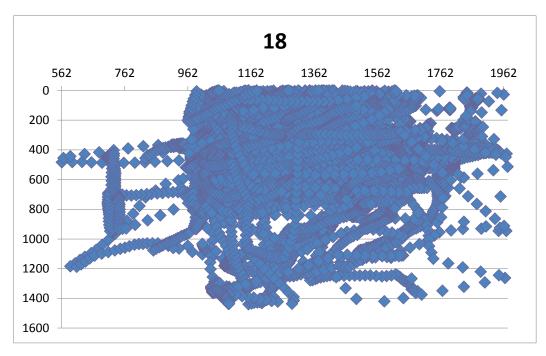
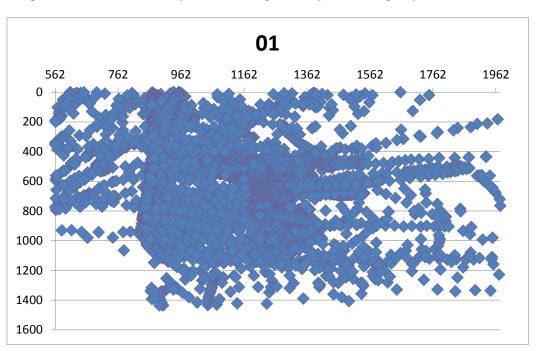


Figure 7: Illustrated Example of Reading from Eye-Tracking Experiment



Some participants, rather than showing a definitive reading pattern in their gaze data, provided a more scattered gaze plot. It appears that these participants were looking over many differing aspects of the website and not necessarily reading the content thoroughly. Two examples of this can be seen below in Figures 8 and 9 for participants 25 and 30. Despite this scatter, there is a significant bulk of gazes centring around the review content area so it is safe to say they were still looking at the review content rather than just blindly looking over on the screen.

A largely scattered gaze pattern reflects a reader who is gazing at all aspects of an online review website. They want to absorb the differing types of online review information; summary statistics, photos and Also In the Area sections as well as the online review content. This also has implications for online review website developers and marketers; although some readers thrive on the review content, some readers still need the other review aspects. This could be due to a need for the likes of photos or the individual review source to corroborate the review content or it could be due to wanting to gain an overall understanding of what they are reading about. Either way, this highlights the fact that reading behaviour differs for every reader and although the prior participants favour greatly the review content, participants such as those in Figures 8 and 9 to read the differing review aspects in order to gain an understanding of what is being reviewed.

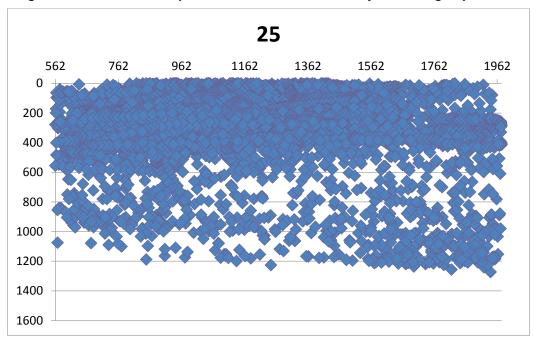


Figure 8: Illustrated Example of Scattered Gazes from Eye-Tracking Experiment

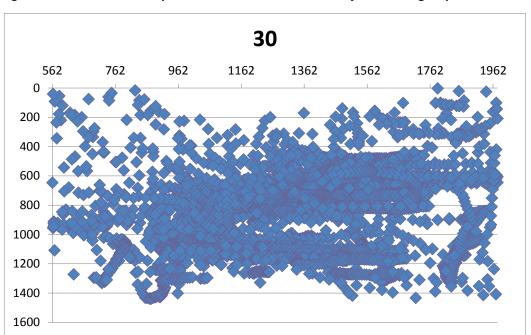


Figure 9: Illustrated Example of Scattered Gazes from Eye-Tracking Experiment

The next commonality in the gaze plot data was that of top-of-screen based reading. As seen in Figures 10 and 11 from participants 37 and 10, it was common for participants to read in the top third of the screen. This could occur with participants scrolling so as which reviews they are reading rest in the top third of the screen. Overall, what this common behaviour shows is that most participants have a lack of gazes towards the bottom of the screen. This represents a favour for reading from the top or middle of the computer screen; something that could be attributed to the Western-style reading of left-to-right, top-to-bottom reading style of the participants.

These participants fully represent the idea present by Buscher et al. (2010) that people have preferred reading regions on the screen. These participants, such as those in Figures 10 and 11, have a preference of reading within the top half of the screen. This may be due to their eyelevels and the screen or that reading the bottom of the screen requires more effort in having to move your eyes. It also may be a way for readers to keep their place when reading a long document and not lose where it is they were reading. This has implications of online review website developers and marketers in that important online review factors or content should be aimed towards the top half of the screen so as it catches these readers' eyes. It would also justify why on many dedicated online review websites the overall summary statistics are placed near the top of the screen.

Figure 10: Illustrated Example of Top-of-Screen Based Reading from Eye-Tracking Experiment

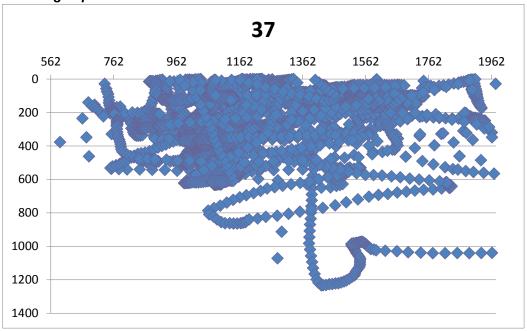
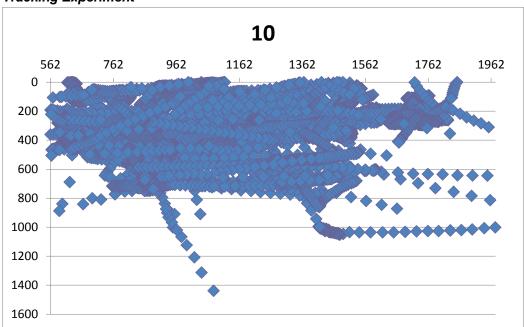


Figure 11: Illustrated Example of Top-of-Screen Based Reading from Eye-Tracking Experiment



This is not to say that participants did not read the bottom of the screen. Rather, the majority of participants gazed more often at the top to middle of the screen. Despite this, there were a few anomalies. The likes of participant 35, as seen below in Figure 12, shows that some participants did tend to read towards the bottom of the screen. Many did gaze at the bottom of the screen. Rather than reading often here most participants just appeared to spare it a few gazes and overall this was just not the most popular pattern.

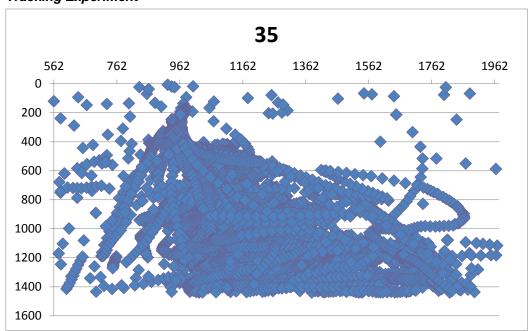


Figure 12: Illustrated Example of Bottom-of-Screen Based Reading from Eye-Tracking Experiment

Finally, something that appeared with a few participants was that of an apparent sweeping motion in their gazing. Figure 13, for participant 26, illustrates an example of this behaviour. This appears to be an interesting reading behaviour but appeared in a few participants gaze data to differing extremes and sometimes differing curve directions. This could be attributed to a more scanning behaviour towards reading or it could be that these participants are drawn to certain areas of the website often.

Figure 13: Illustrated Example of Sweeping Reading Behaviour from Eye-Tracking Experiment

What these differences in overall gaze pattern suggest is that everyone reads slightly differently. This supports Buscher et al.'s (2010) idea that people have preferred reading regions on a screen when they read long documents. This is apparent amongst all our participants; no too gaze distributions were the same and all show an uneven distribution of visual attention.

4.1.3 Coding Results

4.1.3.1 Behaviour When Reading a Long Document

The first two codes identified two differing behaviours in reading style; that of stopping to read content versus reading whilst continuing to scroll through the content. These codes identify how it is the participant's managed the long document and its required scrolling; looking at whether they scrolled and then stopped to read, or whether they continuously scrolled whilst reading. The first code used was that of whether participants stopped scrolling to read the reviews. This code stands for the action of actually stopping scrolling at the individual reviews to read them, or reading reviews without scrolling during reading. The majority of participants did stop scrolling to read reviews; 92.9% of participants stopped at some point during the task to read a review.

The next code was similar, but looked at the action of scrolling whilst reading. This code identified participants who scroll whilst reading reviews at any time during the task. It was found that 50% of participants engaged in this behaviour. Some participants favoured one style, whilst others appeared to engage in both of these techniques. Both of these behaviours can be explained by the idea that everyone has their own preferred reading region on a screen when reading a lengthy document (Buscher et al., 2010). Long reviews were often the focus with

more time spent reading these. Shorter reviews were often only scanned briefly with little focussed reading occurring.

4.1.3.2 Reading Sequence

In looking at the order or sequence to which participants read the online reviews, the next code looked into whether participants tended to read the reviews in the order they were presented during the majority of the experiment. It was found that 64.3% of participants read the reviews in the order they were presented on the website. Likewise, the next code also looked at sequence and identified those participants who looked at a review within the first three notable gazes they did. It was found that only 28.6% looked at the reviews first; with 71.4% looking elsewhere on the website in their first few gazes. This identifies the importance of online review sequence and balance for website developers in that this could influence how people read these reviews; as per Purnawirawan et al. (2012). Likewise, other aspects of the website could contribute to the sequence in which online review factors are read. The sequence of reviews may have an impact on whether readers read the reviews in the sequence they are presented in or even how the majority looked in areas but the reviews first of all.

4.1.3.3 What Draws the Eye Initially

It was also noted those participants who looked at certain online review website factors first; the hotel pictures and summary statistics. This code identified participants who looked at the hotel pictures (as a part of the summary statistics) within their first three notable gazes. It was found that 42.9% of participants partook in this behaviour. Participants looking at the summary statistics as their first gaze also appeared to be a somewhat common behaviour when coding the eye-tracking videos. The code saw 25% of participants gazing at the summary statistics as their very first notable gaze.

Whether this is due to the summary statistics being fairly in the middle of the screen (when the webpage was scrolled to the top) it is unclear but possible. As suggested by Chevalier and Mayzlin (2006), people tend to rely greater on the actual review content; in this case, the summary statistics and included photos rather give readers an idea of what the product or service is like overall. Hence they look at these review factors first before getting the actual information by which they will make their purchase decision or evaluation.

4.1.3.4 Scrolling Prior to Reading

Another interesting behaviour whilst reading online review websites that was noted was that of scrolling quickly through the entire page before settling to actually read the content. This code saw 57.1% of participants quickly scrolling through the webpage before they actually started

reading the online review content. This behaviour suggests checking the document for how much information there is to read before starting on the task.

This could potentially stem from the experimental setting; participants checking how much 'work' they are needing to do before they are finished, or it could be an innate behaviour of online review readers; seeing how much information is available to them. This behaviour could also indicate interest in the website at hand. The amount of time spent scrolling is a signal of interest of the reader (Claypool et al., 2001). Scrolling can also signify that the reader finds the document useful (Bae et al., 2006). Those who exhibit this reading behaviour may signal some initial interest in the task at hand. I suspect there may be two types of people who engage in this behaviour; those who scroll the document prior to reading to see how much information there is to read, and those who scroll the document prior to reading to check whether the document contains interesting information. This is suspected due to some engaging in this behaviour more than once whilst others only engaged in this behaviour at the beginning of their task.

4.1.3.5 Online Review Website Factors

The next codes focussed around whether participants looked at certain online review website factors or sections at all; be that once or many times. These sections were separated into hotel photos, ratings and source. The hotel photos aspect identified that 89.3% of participants gazed at the hotel photos (which make up a part of the summary statistics bar near the top of the webpage). This suggests that photos are of importance to readers in that they attract the eye. This could be explained by the idea that people compare images available with the content they are reading, especially for negative content (Just & Carpenter, 1976a).

It was also calculated from the raw gaze plot data the percentage of total gazes for each key areas of the screen (as measured vertically) or online review factors: the individual review star ratings, the individual review source (the reviewer), the Also In The Area section (suggestion of alternative locations in the same area) and the actual review content area. The mean and median percentage of total gazes can be seen below in Table 5. This percentage data adds further information to the manual coding as to which participants looked at each of these areas at any time during their gaze recording. This percentage data furthers this coding by highlighting how often these areas were looked at by each participant; the manual coding was limited in that it only identified whether it was looked at. Oftentimes, participants reading negatives spent more time concentrated on the attached photo or management responses.

Table 5: Percentage of Total Gazes

Online Review Website Factor	Mean Percentage of Total Gazes	Median Percentage of Total Gazes
Individual Review Star Ratings	27.48	23.80
Individual Review Source	12.49	11.94
Also in the Area (nearby hotel alternative suggestions)	20.41	13.77
Review Content (actual review written content)	86.84	87.57

The ratings aspect looked into any participants who had looked at the individual review star rating; the 5-star rating given by the reviewer about the hotel, at any time during their eye-tracking experiment. It was found that 60.7% did so. This 60.7% had a mean of 2142.39 gazes per person in the ratings area of the screen; a median of 1373.50 gazes. In regards to their total gazes over the entire website, participants on average spent 27.5% (median = 23.8%) of their total gazes on the ratings area of the website. Review valence; often determined through the review rating, has been consistently found to influence readers (Flanagin & Metzger, 2013; Lockie, Waiguny, & Grabner-Kräuter, 2015; Purnawirawan et al., 2012; Yang & Mai, 2010). As such, the review rating is an often sought for aspect of the review website. However, as the findings are not extremely high this suggests that participants fall more in line with that of Chevalier and Mayzlin's (2006) findings. They suggest that the summary statistics, of which the review rating could be associated with, are not solely relied upon by readers; rather they focus more on the review content.

The source code identified any participants who gazed at the individual review's source (i.e. the reviewer) at any time. It was found that 89.3% of participants gazed at the review source during the experiment. These participants had a mean of 964 total gazes on the individual review source area of the online review webpage; a median of 558.50. This difference in mean and median is accounted for by some participants reading the webpage for longer than others and therefore producing a greater number of gazes. This is supported from the minimum source hits being 26 and the maximum being 4500; quite the significant range. In regards to their total number of gazes over the entire webpage, the source area accounted for on average 12.5% (median = 11.9%) of a participants total gazes.

Despite being significantly less than the ratings gaze hits, this is still a notable number of gazes for the smaller sample size. Both source credibility and reviewer activeness influence reader perceptions of the online review (Flanagin & Metzger, 2013; Kusumasondjaja et al., 2012; H. Lee et al., 2011; Smith et al., 2005; Sparks et al., 2013; Willemsen et al., 2009; R. Zhang & Tran, 2010). Readers are often able to ascertain whether the review content is useful or

trustworthy by who has written it; their experience in the product/service area and/or their experience in review writing. Much of the time, participants read a review and then straight after looked at that review's source; for example, participant 11 read review 6 and then looks at the review 6 source, they read review 7 and then read the review 7 source. This was a common behaviour that did not necessarily occur for every review a participant read; rather it occurred more sporadically. Another behaviour that occurred was the reading of a review, followed by its source and then the reader glanced at the following review's source; almost as if comparing reviewers. It is apparent from this that there is some thought process occurring whilst people read online reviews; likely this is an evaluative process.

The number of gaze hits which fell in the Also In The Area section and the review content section were also noted. The Also In The Area section saw a mean gaze hit score of 1535.79; a median of 852.50. This score is understandably fairly low due to it being a rather small section in the scheme of the whole website. This accounts for on average 20.4% (median = 13.8%) of a participants total gazes over the entire website.

In contrast, the review content area saw a mean of 7427.36 with a median of 6147 hits. This area was the largest specific area for hits; although this is to be expected for an online review website where this section makes up the bulk of the website content. This also compared with the general number of hits on the whole website; from the edge of the source area to the opposite horizontal side on the edge of the Also In The Area section. This section saw a mean gaze hit number of 8436.25; a median of 7109. This is not significantly more than that of the review section gaze hit number. This lower gaze hit results for the Also In The Area section does make sense; this area is not largely content-relevant. This represents a participant on average using 86.8% (median = 87.6%) of their total gazes on the review content area. Readers want the details from review content, rather than relying on the likes of summary statistics (area at the top of the webpage with overall summary statistics about the hotel, compiled from the individual review star ratings and actual hotel management information), with specific content being favoured by readers (Chevalier & Mayzlin, 2006; Sparks et al., 2013). As the Also In The Area section provides no specific content, it is understandable the readers viewed it less than other review areas.

4.1.3.6 Individual Review Gazes

Gazes onto each individual review were also noted and can be seen in Table 6. Review 1 saw 89.3% of participants gazing over or reading this review and review 2 saw 96.4% of participants doing the same. This high percentage could be influenced by these reviews being at the start of the review set. Review's 3 and 6 both saw 75% of participants viewing these reviews and review's 4 and 5 both saw 78.6%. Review 7 saw an increase to 82.1% of participants viewing; potentially due to the management response attached. Review 8 saw a notable decrease to only 53.6% of participants viewing. This could be attributed to it being at the end of the review set and readers may have felt they had already received adequate information by the time they reached the end of the webpage.

Table 6: Percentage of Participants Who Viewed Each Review

Review Number	Percentage of Participants Who Gazed Over Each Review	Individual Review Length	Individual Review Star Rating	Management Response Included
r1	89.30	Short	4	No
r2	96.40	Long	4	No
r3	75.00	Short	5	No
r4	78.60	Short	2	Yes
r5	78.60	Long	1	No
r6	75.00	Short	1	No
r7	82.10	Long	2	Yes
r8	53.60	Long	5	No

It is apparent that the sequence by which online reviews are presented could influence their viewership. As suggested by Purnawirawan et al. (2012) both the balance and sequence of reviews can influence how readers perceived said reviews. Likewise, the valence of the reviews may also have an impact on viewership; although this does not appear to be the case with the highest viewed review being of a positive valence and the second most viewed a negative valence. What this could mean is that it is the sequence of the reviews having an influence in the first two reviews gaining the highest readership.

As these are the first reviews readers see, the majority look at them; likewise the last review has the lowest readership. Review 2 may also have the highest readership due to its length and detail with readers preferring specific information in reviews (Sparks et al., 2013). This can also be seen with the equally as detailed review 5. Although review 7 falls ahead in readership than that of review 5, review 7 contains a management response which may catch the attention of the reader as that too provides for information and detail into how the management deal with issues. This would explain the higher readership for review 4 despite it being short and lacking significant detail.

4.1.4 RQ1: Discussion

As illustrated above, the different online review factors do work together. As seen by the straight coding, people look at numerous factors of the review and review website in order to gather the information they need. For starters most people stop scrolling to read online reviews; as if people prefer reading the top half of the screen. Likewise, half of readers scroll whilst reading at some point like a continuous motion. This coincides with the large amount of readers who read online reviews in the order in which they are presented as well as most readers not looking at the actual review content within their first gazes. This relates to the importance of review

sequence and balance for online review websites; both of which have been found to influence how readers perceive online reviews (Purnawirawan et al., 2012).

Most people look at the 'non content' review factors first; half look at the hotel pictures first, most do not actually look at the summary statistics first, thus this leaves the larger banner photo which is highly eye-catching. Approximately half of the readers scroll the entire document quickly before reading as if to see how much information is available to them. This suggests that people liked to 'set the scene' so to say for the online reviews they are about to read.

Most people look at the individual review star ratings (60%), the hotel photos (90%) and the review source (or reviewer – 90%). In regards to gaze hits the star rating gazes hit numbers had a median of 1373.5, the source (or reviewer) had a median of 558.5, the review content itself had a median of 6247 and finally the Also In The Area section had a median of 852.5. This suggests that the review content is in fact the most looked at area, followed by the star rating and Also In The Area section, followed by the reviewer. What this suggests is that in reading online reviews, people like to get a summary of the experience (the star rating) and they also like to keep their options open by glancing at alternatives and how they compare with the ratings of the product/service they are looking at.

Despite having the lowest median number of gaze hits, the reviewer is also consulted when forming an opinion about a product or service; that by identifying the reviewer, the reader can determine whether the information is valid and trustworthy. The gaze plots also support these findings; that most people look at all review characteristics although this largely centres on the content. People want the facts and the details rather than rely on the summary statistics; they do want a brief summary in the form of a star rating for each individual opinion and they want to determine whether this information can be trusted. They also like to see, either in comparison to what they are reading or as alternatives, nearby (in the case of hotels) or similar products or services.

Finally, people do tend to look at certain reviews above others. This can be the results of all the different review characteristics influencing the reader. Most people looked at the first review; with even more looking at the second. The first review would be the first review content they see; so as they may be more likely to read it. The second review was longer and more detailed; this can be attributed to the greater number of participants reading this review. A reasonable even amount of participants read the third, fourth, fifth and sixth reviews; despite being of differing valences and lengths. The least amount of people read the last review. This could be the effect of the review balance and sequence, as per Purnawirawan et. al (2012), the fact that people had enough information by the last review, or it could be solely related to the review characteristics.

It appears that readers view negatively valenced reviews all rather evenly; positively valenced, on the other hand, sees mixed reactions claiming both the most viewed and least viewed. What is interesting is that the most disliked reviews are the shortest (one paragraph reviews; review 1, review 3 and review 6). Again, this could an effect of review balance and sequence, or it could be the review characteristics influencing the viewership.

This has implications for marketers and management alike. It suggests that not only are the above discussed online review factors important, but they work together to give the reader the information they are searching for. Developers of online review websites need to ensure the correct information is being delivered by these means so as to help the reader make a purchase decision easily.

4.2 RQ2: The Liking of Reviews and Actual Gazes

The online questionnaire data was downloaded from Qualtrics to SPSS. Before any analysis took place, questions that required reverse coding were done so and any participants whose eye-tracking data was insufficient were deleted; two participants were excluded from the data set. Frequency analysis was completed on the data set to understand the individual characteristics of the participants and our sample as a whole as well as their opinions of online reviews.

First of all, the final data set (as seen in Appendix 12) was made up of 39.3% male (60.7% female). The age of participants saw 92.9% under the age of 30; 78.6% were aged 25 or younger and 39.3% were aged 20 or younger. This age range represents the common age of those who use the internet and therefore more likely to engage in eWOM. This idea was supported in that all participants stated that the use or have used online reviews to some degree.

4.2.1 Opinions towards Online Reviews

4.2.1.1 Online Review Factors

The questionnaire asked participants their opinions towards online reviews and online review characteristics (as seen in Appendix 3). Participants were asked to rate the following review characteristics on a 7-point bipolar Likert scale, ranging from unimportant to important: talking about experiences, rating given in the review, review consistency within itself, review consistency with other reviews, argument diversity and density, reviewer expertise and review length. For the sake of this analysis, all answers ranging a one to three are interpreted as unimportant; all answers ranging from five to seven are interpreted as important; and all answers of a four are interpreted as neutral. The findings of these questions are quite interesting and can be seen in the below Table 7.

Table 7: Summary of importance of review characteristics

Review Characteristic	Percentage Rated as Important	Percentage Rated as Neutral	Percentage Rated as Unimportant
Discussion of experiences	100.0	0.0	0.0
Rating	92.8	3.6	3.6
Review consistency within itself	78.6	10.7	10.7
Review consistency with other reviews	71.4	10.7	17.9
Argument diversity	71.4	14.3	14.3
Argument density	67.8	14.3	17.9
Reviewer expertise	50.0	21.4	28.5
Review length	17.8	39.3	42.8

All participants believe the discussion of the reviewers' experience of a product or service; or in this case a hotel, are important. Of all key review characteristics, including your personal experience in a review is the most important review characteristic to review readers. Likewise, participants find the rating that the review gives of the product or service to be important; with 92.8% finding this characteristic to be of importance when reading online reviews. These two key characteristics of which participants find to be most important support Chevalier & Mayzlin's (2006) notion that people do not solely rely on summary statistics such as the review's rating. Rather, people read the actual content of online reviews and find this to be of use and importance.

Review consistency within itself and review consistency with other reviews were also found to be of some importance. A review having consistency within itself sees a review that does not contradict itself. A notable amount of participants found this characteristic to be of importance; 78.6% of participants. Likewise, the consistency of a review with other reviews in the set was also found to be important by 71.4% of participants. This idea of review consistency; both internal and external, suggests that people want reviews that do not contradict themselves nor are they outliers in the review set.

This aligns the notions found in investigating review balance such as done so by Purnawirawan et al. (2012). They suggest that an unbalanced set of online reviews are more helpful than a balanced set; that a set of reviews with more of a variety of opinions is more helpful. Our participants suggest that consistency amongst a review set is more important. This suggests that consistency amongst a review set represents the support of (or lack of support for) a

product or service. Thus, our findings of review consistency with other reviews as being important to consumers is corroborated by the idea of an unbalanced review set being favoured.

The argument itself in reviews is also of some importance to readers. It is of lesser importance than the prior discussed review factors, but still of some importance. Argument diversity sees 71.4% of participants viewing it as of importance. The density of the argument is seen to be of slightly lesser importance with 67.9% of participants viewing it as important. These findings corroborate those of Willemsen et al. (2009). They found that both argument diversity and argument density contribute to the perceived usefulness of a review (Willemsen et al., 2009). Our results show that readers of online reviews find argument characteristics of some importance; this suggests also that the argumentation presented in a review is of some use to readers.

Interestingly, reviewer expertise was not found to be of the utmost importance; rather people feel somewhat neutral about it. It was found that only 50% found it of importance to online reviews; with 28.5% feeling it is unimportant and 21.4% having a neutral view. This finding appears to follow that of Willemsen et al. (2009) and Racherla & Friske (2012) of whom both found reviewer expertise to be of little use to readers. Our results, like Willemsen et al. (2009) and Racherla & Friske (2012), do not follow the findings of Flanagin & Metzger (2013) who found that expert reviewers are perceived as more credible and accurate than standard users. Our results showing a neutral view towards the importance of reviewer expertise appears to negate this finding.

Lastly, as seen in Table 7, the length of the review was viewed as largely unimportant by our participants. The results show that 82.1% of participants feel the length of a review is either unimportant or they have neutral feelings about it; only 17.8% feel it is an important review factor. This is similar to the findings of Korfiatis et al. (2012). They found that, in studying the online reviews of books, the review length had little to no effect on the reviews helpfulness to readers (Korfiatis et al., 2012). Our results corroborate this; participants admit that this review factor is of the least importance to them.

4.2.1.2 Influential Review Factors

The questionnaire allowed for participants to openly write three online review factors which influence their decision about the product or service. This can be analysed in two ways, both of which will be discussed; as what was rated first, second and third or as which factor/s overall is most influential. Participants most commonly referred to ratings given in reviews (e.g. a star rating) first when listing their most influential review factors; 25% of participants listed this as their first most influential factor. This supports the prior discussed question which also found ratings to be of great importance to review readers.

Participants listed their second influential review factor around the theme of specific review content details. For this factor, the large majority of participants suggested factors such as 'price', 'quality', 'value' and 'staff' were listed in this factor. As their third factor, there was a more

widespread variety of factors given; generally towards review content specific factors as well as more general experience-related factors. These include, in addition to the prior listed examples, the likes of 'comments' and 'honesty'. This again supports the prior discussed question which found the discussion of experience to be the most important factor to participants.

In total, looking at all three factors suggested by participants, the review details are the most often listed influential factor. This was closely followed by the rating or valence in reviews. Overall, this open-ended question supports that of the prior discussed question in that review content details are the most important review characteristic to readers; with ratings following closely.

4.2.1.3 Most Liked Online Reviews

Participants were also asked to identify which reviews and review website components they liked and disliked when presented with them again, as seen below in Table 8.

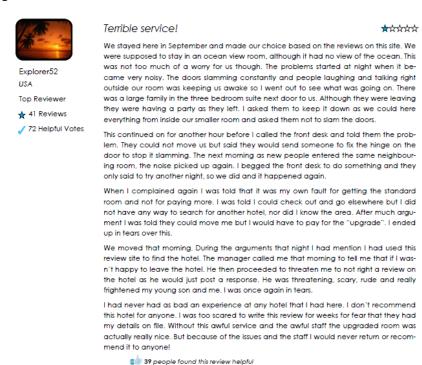
Table 8: Summary of Review Website Likes and Dislikes

Review website area	Percentage Like	Percentage Dislike	Percentage Participants Who Gazed There	Individual Review Length	Individual Review Star Rating	Management Response Included
Title/photos	14.30	0.00	89	-	-	-
Review 1	3.60	10.70	89	Short	4	No
Review 2	21.40	0.00	96	Long	4	No
Review 3	3.60	10.70	75	Short	5	No
Review 4	7.10	7.10	79	Short	2	Yes
Review 5	25.00	10.70	79	Long	1	No
Review 6	14.30	28.60	75	Short	1	No
Review 7	7.10	3.60	82	Long	2	Yes
Review 8	7.10	10.70	54	Long	5	No

Results show that review 5 (as seen in Figure 14) was the most liked review. This review is negative potentially supporting the idea of a negativity effect present in online reviews. This supports the consistently found claim in literature that negative reviews have more of an influence than positive reviews (Browning et al., 2013; Chevalier & Mayzlin, 2006; Cui et al.,

2010; Kusumasondjaja et al., 2012; Mudambi & Schuff, 2010; Racherla & Friske, 2012; Sparks et al., 2013; Yang & Mai, 2010). This review is also long and details the reviewer's experience. It is laid out appropriately with paragraphs, making it easier for the reader to read. Finally, it is written by an experienced reviewer and has a large number of helpful ratings; indicating that other readers found this review helpful.

Figure 14: Review 5 - the Most Liked Review



In contrast, review 6 (as seen in Figure 15) was the least liked review. Interestingly, like review 5 this review also has a negative valence. However, despite both being negative, review 6 is also extremely short. Rather than detailing the reviewers experience at the hotel, it focuses in on one negative experience and on letting readers know not to go to this hotel. This review is also written by a standard reviewer, has a significant number of helpful ratings by fellow readers and is only written as one paragraph.

Figure 15: Review 6 - the Least Liked Review



This review as the least likes could pull into question whether the prior discussed negativity effect exists here. However, I do believe it does. When looking at the rest of the reviews and which ones participants liked, the reviews which are liked more than disliked are negative; reviews which are disliked more than liked are positive. Thus, I believe the dislike in review 6 can be contributed more towards the lack of detail or discussion of experiences; as per the other findings which have shown readers find the discussion of experiences to be the most important and influential review factor.

No participants disliked review 2 or the title and photos area of the website and that all reviews (and website areas) were liked to some degree. This supports the notion that individual characteristics could influence how people read online review websites and that different people are looking for different things in an online review. This is also seen in the second most liked review, review 2, which is also longer and more detailed. Review 2 was also the most gazed at review; with 96% of participants gazing at this review. With review 2's high number of likes and no dislikes along with the greatest number of gazes, it could be concluded that review 2 is actually the most liked review.

It is also apparent that participants liked more reviews than they did dislike them. Whether this is due to being more memorable (be that from length or detail) it is not clear, but notable all the same. This may also suggest that it is a good idea to include a 'like' or 'helpful' button on online review websites (as many do) for readers to indicate to other readers which are the most liked reviews.

Interestingly, as seen in Table 8, there does not appear to be any notable correlations between the identification of liked and disliked reviews and actual gazes. Disliked reviews gain just as many gazes and liked reviews; ranging from 54-75% of participants gazing at more disliked reviews and 79-89% of participants gazing at more liked reviews. This suggests that readers did in fact read all of the reviews in order to make their evaluation of either liking or disliking a review; that they read the disliked reviews which enabled them to make a judgement of the review (and likewise for the liked reviews). Thus, in asking participants which reviews they liked and disliked, they were able to accurately make a judgement as they had read both kinds.

4.2.2 Individual Review Gazes and Reading Behaviour

An analysis was taken on the review gazes and the reading behaviour of participants to determine whether what participants identify as being important in an online review website has an effect on the actual reading behaviour. Stepwise linear and logistic regressions were used to investigate the influence of the importance of review factors rated by the participants on the actual eye gazing behaviour. In most cases the reading behaviour does not reflect the importance attributed as no significant relations were found. However, three significant findings are apparent from the stepwise logistic regression which can be seen in full in Appendix 13 and are discussed below.

For one, gazing at review 4 can predict whether a person will read the online reviews in the order by which they are presented. By including the reading of review 4 in the model, a positive, significant relationship is apparent ($\text{Exp}(\beta)=5.100$, Wald=4.531, p=0.016). The AIC improved from 38.498 to 34.672 (BIC from 39.831 to 37.337) and including the gazing of review 4 in the model explains 71.4% of the data. This finding could result from review 4 being the midpoint of the reviews; that if people read review 4, it is likely that they have been reading the reviews in order (that they have read the prior four reviews) and that they will continue on this pattern.

Next, to predict whether a person would read the summary statistics (overall summary of all reviews, placed at the top of the webpage) there were two reviews that if read could predict this behaviour. The first (step 1 of the stepwise method) is that of review 2. There was a significant relationship between the reading of review 2 and the reading of the summary statistics ($Exp(\beta)=0.210$, Wald=4.914, p=0.012). Including this in the model improves the AIC from 33.491 to 29.242 (BIC improves from 34.823 to 31.907). However, if review 2 is included in the model, review 1 can also be added to explain the data. Including review 1 after review 2 sees a positive significant relationship ($Exp(\beta)=2.705$, Wald=4.531, p=0.046) which improves the prior AIC from 29.242 to 27.261 (BIC from 31.907 to 31.257). Including the reading of both review 2 and then review 1 to predict whether someone will read the summary statistics explains 82.1% of the data. This could be explained by these two reviews featuring at the beginning of the online review website. People could read these two reviews to get an idea of what people are saying about the product or service (or hotel in this study's case) and then go back to read the summary statistics in order to corroborate these two reviews opinions with that of the overall ratings.

Finally, glancing at the individual star ratings of online reviews can be predicted by whether a person reads review 2 and review 7. Review 2 is the first predictor of the reading of the individual review star ratings; this has a positive significant relationship ($\text{Exp}(\beta)=4.472$, Wald=5.022, p=0.016). Including this review in the model improves the AIC from 39.521 to 35.739 (BIC improves from 40.853 to 38.403). If review 2 is read, review 7 being read can also predict this reading behaviour; in the stepwise regression review 7 is the second step that can influence the reading of the individual review star ratings. This also has a positive significant relationship ($\text{Exp}(\beta)=0.392$, Wald=3.763, p=0.021) and improves the AIC from the first step from 35.739 to 32.406 (BIC from 38.403 to 36.403). Including both review 2 and then review 7 in the model explains 78.6% of the data.

This finding could results from review 2 being the first detailed review on the webpage and is positively valenced. Review 7 is reasonably detailed also but is negatively valenced and could be seen as similar to review 2 in its level of detail due to its accompaniment of a management response. It is likely that these two reviews predict the reading of the individual review star ratings due to them being of opposing rating (one positive and one negative) with similar amounts of content which lead people to look at the individual review star ratings in order to compare them with each other and with other reviews. These two reviews received high numbers of gazes; it is likely that these reviews catch readers' eyes and given their level of

opposing detail see readers only need to look at the individual review star rating to gauge the general idea of the rest of the reviews.

4.2.3 RQ2: Discussion

There doesn't appear to be too much relationship between liking the reviews and the actual gazing of them. The most liked review, review 5, was not the most gazed at; rather it sits reasonably evenly amongst review 3, review 4 and review 6. Interestingly, the second most liked review, review 2, had the second most gazes; however, it had zero dislikes. Thus in this case it can be said that the most liked review with no dislikes did received the most gazes. The review with the least number of gazes, review 8, however, was not the most disliked. It was disliked more than liked by readers, just not the least liked of the reviews.

The most disliked review, review 6, interestingly also had a reasonable number of likes. This review really seems as though people had an opinion rather than being neutral. Thus, it appears this review simply caused a reaction and most readers had an opinion of it. Review's 1 and 3 actually saw the lowest number of likes; however, they did not show the highest number of dislikes. It appears that these two reviews create rather neutral opinions towards them. Review 4 saw an even number of likes and dislikes; it also fell in the mid-range of number of participants reading it. Thus, overall it can be said that the truly most liked review; the one with zero dislikes (review 2), is reflected in its highest number of participants reading it. The same cannot be said with the most disliked review.

No significant results came about from a linear regression of each individual review's gazes against the percentage of gazes of specific review areas; individual review source gazes, review content gazes, Also In The Area section gazes, individual review star rating gazes, or the time taken to read the online review website. However, there were three significant results of a logistic regression of the individual review gazes against the coded reading behaviour. This suggests that some reading behaviours can be influenced by the reviews people read; either content level prompting the need to look at certain review areas or review placement influencing how they read.

These findings have implications for marketers and management in that people appear to be able to form an opinion as to what they like and dislike in a review because they have read a variety. Because people are able to make decisions backed up by what they have read, it is important that online review templates be designed around what we no readers to like; review's such as review 2. This will ensure that consumers are reading all information and gaining the information that they are searching for easier which will help them to make a decision into what it is they are going to buy.

4.3 RQ3: The Influence of Individual Characteristics on the Reading of Online Reviews

Once the separated analysis were completed, both sets of data were analysed together to determine whether there are personal characteristics or traits which influence the way in which online reviews are read. A correlation check was conducted on the personality characteristic measures; the results can be seen in Appendix 14. Table 9 below shows the characteristics that showed a significant correlation. A person's optimism is correlated with their dispositional trust, extraversion, emotional stability and openness. These traits share similarities in that they all relate to a person's outlook on life and their view on people; optimism, trust, relationship comfort, proneness to positivity and openness to new experiences.

Table 9: Significant Correlations of Personal Characteristics/traits

Personal Characteristic/Trait 1	Personal Characteristic/Trait 2	Pearson Correlation	Significance (2-tailed)
LOT	Dispositional Trust	0.513	0.005
	Extraversion	0.593	0.001
	Emotional Stability	0.657	0.000
	Openness	0.542	0.003
NES	Involvement	-0.382	0.045
	Openness	0.348	0.070
Dispositional Trust	Extraversion	0.522	0.004
	Agreeableness	0.335	0.081
	Emotional Stability	0.455	0.015
Extraversion	Emotional Stability	0.360	0.060
	Openness	0.667	0.000
Conscientiousness	Emotional Stability	0.468	0.012

The need to evaluate correlates with involvement and openness (although weakly). These traits are all similar in that they revolve around how critical a person is; evaluative nature, interest in a product or service and how willing they are to try something new. Dispositional trust correlates with extraversion, agreeableness (although weakly) and emotional stability. These traits are all

similar in that they surround a person's view on other people and relationships. Extraversion is found to correlate with emotional stability and openness; all similar in that they surround people, relationships and positive outlooks. Finally, conscientiousness correlates with emotional stability; both similar in their dependability and positivity. Because of these correlations, the following analysis methods were chosen.

Due to the nature of the dependent variable, two analyses were chosen to look into the different types of data. First, a linear stepwise regression was performed using the reading behaviour data which had been calculated; percentages of total gazes for each participant of the individual review source, individual review star rating, review content and Also In The Area section. This method was chosen as the dependent variable is continuous and therefore suitable for this type of analysis.

Second, the reading behaviour data which was coded was analysed. This data was coded as 0 (no) and 1 (yes) as to whether participants engaged in this reading behaviour. The analysis used here was a logistic regression using the stepwise method. This method is suited to analysing this type of data due to the dependent variable being binary and the sample size being smaller.

Logistic regression is the most suitable analysis for this data due to the dependent variable being categorical and binary and the independent variables being continuous (Garson, 2011). With this data, we cannot assume a normal distribution (smooth bell-curve) and as such an ANCOVA analysis is inappropriate (Seltman, 2014); linear regression does not assume linearity in the data and does not require the data to assume a normal distribution (Garson, 2011). Rather, for smaller samples such as is found in this data, the use of the Wald statistic is better suited than the t-test in testing significance when using a categorical, binary dependent variable.

The logistic regression as calculated via SPSS gives a Wald statistics and an Akaike's information criterion (AIC) and Bayesian information criterion (BIC). The Wald statistic tests the significance of coefficients and the AIC and BIC tests the quality of the model (SPSS Inc., n.d.). It also provides as to the observed versus the predicted responses; allowing for a percentage to be given as to how much data the model can explain. Overall, the logistic regression analysis is appropriate to the binary and categorical data as it can be used to give an estimation of the odds of a certain event occurring (Garson, 2011).

4.3.1 Individual Characteristic Measures

Along with measuring opinions towards online reviews and their factors, the online questionnaire measured participant individual characteristics. The scales used were: Life Orientation Test (LOT) measuring optimism; Analysis-Holism Scale measuring thinking style; Need to Evaluate Scale (NES) measuring the tendency to evaluate; Big Five personality scale measuring key personality traits; Personal Involvement Inventory measuring personal

involvement in online reviews; and the Philosophies of Human Nature scale, with a focus on the trustworthiness dimension so as to measure dispositional trust.

4.3.1.1 Life Orientation Test

The Life Orientation Test (LOT), on a 5-point Likert scale, measures optimism. Each question has a neutral score of 3.00 and the full frequency analysis can be seen in Appendix 15. Overall, the sample has a relatively optimistic outlook on life. This is represented by an average mean score of 3.69 (median = 3.83 and mode = 3.83). A Cronbach's Alpha of 0.785 shows this measures reliability. Despite being overall optimistic, the sample still saw some participants rating as pessimistic; only 7% of participants are relatively pessimistic with a score below 3.00.

4.3.1.2 Analytic-Holistic Thinking

The analysis-holism scale showed interesting results; all of which can be seen in Appendix 16. This scale measures the differences in cultural thinking styles; classing participants as either analytic or holistic. It is made up of four factors: causality; attitude towards contradictions; perception of change; and locus of attention. This scale is measured on a 7-point Likert scale with 4 being the neutral score for individual questions and for the individual factors (two questions used in each factor).

First of all, looking at mean scores for the overall scale reveals that the sample falls more towards a holistic thinking style with a mean of 5.29. This is supported by a median of 5.13 and modes of 5 and 5.13. Interestingly, there is a minimum mean score of 4.13; notably just above the neutral score. This is supported by a Cronbach's Alpha of 0.612 showing an acceptable reliability level for this smaller sized sample.

In looking at the specific factors, it is apparent that each factor is pretty similar overall; there does not appear to be one stand out factor influencing the results. The perception of change factor, with a mean score of 5.41 (median = 5.50, mode = 5.50) scores the highest in holism; but only just. The locus of attention follows closely behind with a mean score of 5.30 (median = 5.25, mode = 5.00) along with causality with a mean score of 5.27 (median = 5.50, mode = 5.50). Lastly, with the lowest holism rating amongst the four factors is that of attitude towards contradiction with a mean score of 5.16 (median 5.25, mode = 5.00). The attitude towards contradictions also received the lowest individual score, with a minimum mean score for one participant of 1.50; a score very low in holism (a highly analytic score). Overall, no overall factor falls into a low-holism (or analytic) thinking style.

4.3.1.3 Need to Evaluate

The Need to Evaluate Scale looks into individual differences in the tendency to engage in evaluative behaviour and uses a 5-point Likert scale. With a neutral score of 3, our sample has

a mean score of 3.33 indicates that the sample has a slightly above average tendency to evaluate (median = 3.31, mode = 2.88). However, in looking at the minimum mean score of 2.19, there are some participants who have a lower need to evaluate; specifically 28.6% of participants fell under the neutral score (see Appendix 17). A Cronbach's Alpha of 0.811 shows the reliability of this data.

The overall mean shows a slightly above average need to evaluate. This could be explained by higher needs to evaluate influencing greater evaluations of unfamiliar content (Jarvis & Petty, 1996). As the online review content was unfamiliar, and the questionnaire followed this reading, a slightly higher need to evaluate may have come about. If this was familiar content, the overall score may have been more reflective of the median split results.

4.3.1.4 Ten-Item Personality Inventory

The Ten-Item Personality Inventory allows for a compact measure of the Big Five personality traits: extraversion, agreeableness, conscientiousness, emotional stability and openness to experience. This is measured using a 7-point Likert scale. Overall, a mean score of the entire scale shows that participants generally rated higher in each of the five personality traits (as seen in Appendix 18); an average mean score of 5.08 (median = 5.20, modes = 5.20 and 5.40) where a neutral score would be equal to 4. All together, the 10-item personality inventory has a Cronbach's Alpha of 0.680; suitably reliable for a smaller sample such as in this study.

However, of particular interest is that of the separated five personality traits. These traits were each measured using two items; when added together to form a score, a score of 4 would be neutral. The extraversion trait saw a mean score of 4.82 (median = 5.00, mode = 5.00); meaning the sample appears to be more extraverted than introverted. Being more extraverted than introverted, the sample is quite assertive and energetic, being more comfortable with a number of relationships (Gosling et al., 2003; Jung, 1971). This could simply be attributed to the business student sample, with students often networking with others and often comfortable with expressing their own opinions.

The sample also appears to be slightly agreeable, with a mean score of 4.93 (median = 5.00, mode = 5.00). This slightly above average level of agreeableness suggests that the sample prefers to avoid conflict; that they are cooperative and friendly (Costa & McCrae, 1992). This could stem from their experience in education settings where they are encouraged to participate in group- or team-based work.

The sample was quite conscientious, with a mean score of 5.21 (median = 5.50, mode = 6.00). A conscientious sample is one of which are responsible and dependable. They are organised and self-disciplined (Costa & McCrae, 1992). This is positive for research as they are dependable and less likely to give false information during research. Conscientiousness could stem from the self-discipline that is encouraged to develop throughout the university level education. As our sample was largely student based, this more conscientious sample could

stem from the more senior students involved (final year undergraduate or post-graduate students).

The sample was also reasonably emotionally stable, with a mean score of 4.73 (median = 5.00, mode = 6.00) and thus are less prone to negativity or neuroticism and are less likely to become upset (Costa & McCrae, 1992; Digman, 1990; Goldberg, 1992). Emotional stability does not have to be high for a person to perform better. Lower emotional stability can act as a motivator (Bratko, Chamorro-Premuzic, & Saks, 2006). This fairly neutral result of the overall sample could reflect higher motivation or preparation amongst the sample.

The sample is quite open to new experiences, with a mean score of 5.68 (median = 5.50 and modes = 5.50 and 6.50). The sample therefore rated highest in openness. This means that they sample is curious and cultured and quite intellectual (Costa & McCrae, 1992; Goldberg, 1992). This is reflective of the student-based sample. Despite all factors lying above the neutral scale rating, none are notably strong to either end of the scale. In appearance, the sample appears well balanced in their individual characteristics.

4.3.1.5 Product Involvement

The Product Involvement Scale was implemented to measure involvement with online reviews. This scale is measured using a 7-point Likert scale and can be divided into a cognitive and an affective dimension. In mean scoring the results, it is apparent there is an average score of 5.22 (median = 5.55 and multiple modes) for each item as seen in Appendix 19. This measure had a Cronbach's Alpha of 0.906 showing the high level of credibility within this data. With a midpoint of the scale being 4, the sample overall felt reasonably involved with online reviews.

Participants may rate higher in product involvement in this experimental setting. They were given both online reviews and blogs to read to try and avoid a bias, but it is still possible that being given the online review content encouraged them to be more involved with them. This scale is constructed of two dimensions; cognitive and affective. In studying these two dimensions individually, is a slight difference between the two for the results. The sample rates slightly higher in the cognitive dimension than the affective; means of 5.73 (median = 6.00 and multiple modes) and 4.71 (median = 5.10, mode = 5.20) respectively. In this analysis, five items made up each dimension with a midpoint of 4. Thus, both dimensions overall rated higher than the midpoint with the cognitive dimension contributing to greater overall involvement than the affective dimension.

4.3.1.6 Dispositional Trust

The Dispositional Trust dimension of the Philosophies of Human Nature Scale measures trust and honesty. It is measured on a 6-point Likert scale, with a midpoint of 3.5. Results show an average mean score of 3.97 (median = 3.89, mode = 4.64) as seen in Appendix 20. This shows an above average level of dispositional trust for the overall sample. Despite overall the results

showing the overall sample having an above average level of dispositional trust, 25% of the sample were below the midpoint on the scale; below average levels of dispositional trust. This data had a Cronbach's Alpha of 0.496 and shows the lowest reliability of all of our data; potentially due to the smaller sample size.

This above average level of dispositional trust coincides with a higher level of optimism. Like optimists, those with higher levels of dispositional trust tend to have a more positive view of people (L. S. Wrightsman, 1964). The finding with this sample supports past studies; Wrightsman's (1964) findings saw similar results with most samples falling close to the neutral point. What the findings suggest is that the sample has an overall above average trust in online reviews. This could be explained by electronic word of mouth's resemblance to traditional word of mouth; a highly trusted source of information (Dichter, 1966) which feels to readers as if they are getting that information from a friend or family.

4.3.2 Personal Characteristics and Traits Which Influence Calculated Reading Behaviour

The first analysis conducted was that of personal traits and the calculated reading behaviour. The calculated reading behaviours were those of which were calculated after coding the eye-tracking data; turning the number of gaze hits for each participant into percentages of each participants total gazes; for each dependent variable a stepwise regression was calculated. The analysis used for this data and the individual characteristics was stepwise regression. The independent variables were: optimism (LOT scale), thinking style (analytic versus holistic), need to evaluate (NES), personal involvement in online reviews, dispositional trust and personality traits (extraversion, agreeableness, openness to new experiences, emotional stability and conscientiousness). The dependent variables were the number of gazes for: source area (individual review source or reviewer), review content area (the actual review written content), ratings area (individual review star rating area), general area (webpage content area), Also In the Area section (suggestions of other hotels in the area) and time (seconds taken to complete the reading of the online review website.

This identified which personal characteristics or traits predict which type of online review reading behaviour. Using the stepwise regression, the number of source gaze hits, review gaze hits and time each saw significant predictors found; as can be seen in Appendix 21; all with at least 95% confidence.

Table 10: Significant Relationships of Calculated Reading Behaviour and Personal Characteristics Using Stepwise Regression

Reading Behaviour	Personal Characteristic/Trait	Beta Coefficient (β)	T-value (t)	Significance (p)	r-sq
Percentage source hits	Dispositional trust	-0.374	-2.059	0.050	0.140
Percentage review hits	Dispositional trust	0.389	2.152	0.041	0.389
Overall Time Spent Reading the Online Review Website	Emotional stability	0.408	2.280	0.031	0.408

In looking at predictors of looking at the source of the review, it was found that there was one predictor of this behaviour, as seen in Table 10. Dispositional trust was found to have a significant relationship with the percentage of source hits (β =-0.374, t(26)=2.059, p=0.050). This relationship is negative; showing that the higher the dispositional trust a person has, the less likely it is that they will look at the source of the review. Dispositional trust was also found to be a predictor of gazing at the review content area of the online review website. Dispositional trust has a significant relationship with the percentage of review hits (β =0.389, t(26)=2.152, p=0.041). This relationship is positive, representing that higher levels of dispositional trust create more gaze hits towards the review content.

This finding corroborates that of the characteristics of dispositional trust; trust in other people. Higher levels of dispositional trust have a lower likelihood of gazing at the individual review sources (or reviewers) and a higher likelihood of gazing at the review content. This follows the characteristics of those with higher levels of dispositional trust; those with higher levels of dispositional trust have greater trust in people (L. S. Wrightsman, 1964). By looking less often at the source of an online review and more often at the review content, readers with higher levels of dispositional trust are showing this. They are showing that they trust that the writer of the review is giving accurate information, without having to corroborate with the source information. Rather, they are simply relying on and trusting the review content.

Lastly, emotional stability is a predictor of the time spent reading the online review website. The personality trait of emotional stability has a significant relationship with how many seconds a person spends reading through the online review website (β =0.408, t(26)=2.280, p=0.031). This relationship is positive and suggests that a higher level of emotional stability contributes towards a person spending more time reading the online review website.

Emotional stability was also found to predict the time spent reading the online review website. Emotionally stable people are less likely to become upset (Costa & McCrae, 1992; Digman,

1990; Goldberg, 1992); and this may transfer across to how they read. Thus, the higher one's emotional stability, the less distressed they may become whilst reading online reviews and the more likely they are able to continue reading. A person lower in emotional stability may find themselves become somewhat upset whilst reading negative reviews in that the product or service they are researching is turning from a possible choice to one which they would not choose. This could stop them from reading further to gather more information.

4.3.3 Personal Characteristics and Traits Which Influence Coded Reading Behaviour

A logistic regression was performed on the coded reading behaviours. The coded reading behaviours were those coded as: no, the behaviour did not occur (0); and yes, the behaviour did occur (1). As this dependent variable is binary, a logistic regression, using the stepwise method, was an appropriate analysis to conduct. As seen below in Table 11 (full analysis of these can be found in Appendix 22), five relationships were found to be significant with at least 90% confidence.

Table 11: Logistic Regression Significant Results of Relationships Between Coded Online Review Reading Behaviour and Personality Characteristics

Coded Reading Behaviour	Personal Characteristic/ Trait	Exp(B) Coefficient	Wald	Significance (p)	Classification Overall Percentage Correct
Scroll and Read	Involvement	0.440	3.290	0.070	53.6%
Read	LOT	0.010	6.579	0.010	
Reviews in Order	Involvement	0.352	3.369	0.066	75.0%
Scroll Document Before Reading	Dispositional Trust	0.323	3.402	0.065	64.3%
Look at Review Star Ratings	Thinking Style	0.234	3.988	0.046	71.4%
Look at Review Source	Openness	0.191	2.874	0.09	89.3%

A scrolling and reading behaviour is influenced by the reader's level of involvement. Involvement is significantly related to the scrolling and reading simultaneously behaviour ($\text{Exp}(\beta)$ =0.440, Wald=3.290, p=0.070). This is supported by an AIC improving from 40.816 to 38.475 (a BIC improving from 42.148 to 41.139) and the significance increasing from 0.079 to 0.070 with the inclusion of involvement in the model, suggesting that this is the most appropriate model. This model is found to represent 53.6% of the data; notably, above the 50% threshold. This relationship is positive suggesting that the higher a person's involvement level with online reviews, the more likely they are to engage in a scrolling and reading behaviour whilst reading an online review website.

People high in involvement have a tendency to search for more information and have higher knowledge about alternative choices (Beatty & Smith, 1987; Maheswaran & Meyers-Levy, 1990). They are able to form attitudes that are greater in their resistance to change and use more criteria in making their choices (Chaiken, 1980; Petty, Cacioppo, & Schumann, 1983). A higher level of involvement predicting a scrolling and reading behaviour can be explained by these characteristics of highly involved people. Scrolling and reading at the same time could indicate a quicker or more fluid reading pattern which allows for more information to be read. This could help a reader is view all differing opinions (or criteria) available and allow for them to develop an attitude about the product or service. Likewise, the continual movement that accompanies scrolling and reading at the same time can reflect higher involvement in online reviews in that the reader decides to continue reading in a fluid motion. This could also indicate that higher involvement with online reviews shows more knowledge about the reading platform; that these readers understand online reviews enough to read through them in a more fluid motion.

The reading of online reviews in the order by which they are presented on the website is related to a person's level of optimism (LOT) and their involvement. In the first step of the stepwise logistic regression, LOT or a person's optimism is the most significant predictor of a person reading online reviews in order ($\exp(\beta)=0.010$, Wald=6.579, p=0.010). The LOT's influence on reading reviews in order is supported by an AIC of 31.208; an improvement from 38.498 without this trait in the model (BIC improvement from 39.831 to 33.873). This is a positive relationship suggesting that a higher level of optimism makes a person more likely to read online reviews in order.

This model also suggests that involvement can also contribute to the reading of reviews in order; second to the LOT. The second step of the stepwise logistic regression showed involvement to be significantly related to the reading of reviews in order ($\text{Exp}(\beta)$ =0.352, Wald=3.369, p=0.066). The AIC for this second step improves from 31.208 to 29.129 with the additional inclusion of involvement in the model (BIC improved from 33.873 to 33.126). Like LOT, this relationship is also positive suggesting that a higher level of optimism and a higher level of involvement increases the chance that a person will read online reviews in order. This model explains 75% of the data; thus is a good fit to explain this data.

For one, the finding that a person's optimism (as measured through the Life Orientation Test) has an influence on people reading online reviews in the order in which they are presented, reflects that of the traits of an optimistic person. According to Scheier and Carver (1985) an optimistic person tends to favour planning and the idea that good things will come. Reading reviews in order represents a more methodological approach to reading. This is similar to that of favouring planning. As such, the finding here falls in accordance with that of an optimists correlation to planning (Scheier et al., 1994).

This represents the idea that those with lower levels of optimism do not always look for the best in the situation; rather they could be searching out specific reviews (or ignoring certain reviews), such as those with a negative valence, to justify their pessimism. Optimists assume things will turn out as they have planned and that good things will happen (Scheier & Carver, 1985; Scheier et al., 1994). Optimists may not need to search for particular reviews or opinions; rather optimists feel that they will get the information that they need simply by going through the review website as it is presented and taking the information as it comes. Thus, a higher LOT's influence on the reading of reviews in order can be explained by the characteristics of optimistic people.

Involvement also appearing in this model to explain the reading of reviews in order coincides with involvement influencing a simultaneous scrolling and reading behaviour. Generally, when scrolling and reading at the same time, a reader would be reading the online reviews in order due to the fluid motion associated with scrolling and reading simultaneously. Involvement may also predict the reading of reviews in order in that it would allow for more criteria to be searched through more information being sought out and stronger attitudes to be made. Thus, although second to LOT, involvement's influence on the reading of reviews in order can be explained through the characteristics of personal involvement.

Dispositional trust is associated with scrolling the document prior to reading. There is a positive significant relationship between dispositional trust and the scrolling of the webpage prior to reading ($\text{Exp}(\beta)=0.323$, Wald=3.402, p=0.065). This suggests that the higher the level of dispositional trust a person has, the more likely they are to scroll the webpage prior to reading. This is supported by the improved of the significance level from 0.086 to 0.065 and the AIC from 40.243 to 38.314 (BIC improved from 41.575 to 40.979). With the model explaining 64.3%, this model sufficiently explains the data.

Dispositional trust predicting a reading behaviour of scrolling the document prior to reading could be explained by the characteristics of dispositional trust. Wrightsman (1975) suggests that trust is the basis of any relationship; this relationship could transfer onto the likes of online reviews. By scrolling the document prior to reading, this could be a way for trustful readers to confirm that the online reviews are in fact worthy of their trust. It could exhibit a confirmatory behaviour; allowing for readers to confirm their current trust in what they intend to read and that there is enough information that what is provided can be trusted. Readers come to online review websites because they believe they can trust the content; that it is a form of word of mouth which is highly trusted (Dichter, 1966). Scrolling prior to reading confirms this trust is rightly

placed in that the website provides the reader with the content (or even the amount of content) that they were searching for; electronic word of mouth.

A persons thinking style, be that analytic or holistic, is related to whether they look at the individual star ratings of the reviews at any time. Thinking style is positively significantly related to looking at the individual star ratings of reviews ($\text{Exp}(\beta)=0.234$, Wald=3.988, p=0.046). This positive relationship suggests that the more holistic a person is the more likely they are to look at the individual star ratings of the reviews. This is supported by an improvement in the significance level from 0.059 to 0.046 and in the AIC from 39.521 to 36.484 (BIC from 40.853 to 39.148). This model explains 71.4% of the data.

Holistic thinkers like to gauge the general idea of the situation; they look at the overall idea (Choi et al., 2007; Dewey, 2007). Through the individual review star ratings they can do just this without having to read the entire review content. They can see what the service is like and get a general feel for what it is they are about to read about. With holistic thinkers being more likely to look at the individual review star rating, this represents the idea of gauging an overall view of the information. It represents that holistic thinkers look at more than just the review content; that they take other information into consideration also.

Whether or not a person looks at the source of each review is influenced by their openness. There is a significant relationship between a person's openness, a personality trait, and whether they gaze at the online review sources ($\text{Exp}(\beta)=0.191$, Wald=2.874, p=0.09). This relationship is positive; suggesting that the more open a person is in their personality, the more likely they are to look at the sources of reviews. This is supported by an AIC improving from 21.068 to 18.702 (BIC improvement from 22.400 to 21.366). Including openness in this model improves the significance from 0.173 to 0.090 and sees the model explain 89.3% of the data. As such, this model highly explains the data.

The influence of openness on looking at the review source at any time can also be explained by the characteristics of an open person. Openness often reflects intellect and curiosity (Costa & McCrae, 1992; Digman, 1990). Looking at the review source reflects intellect and ingenuity in that the source of a review can give information to the reader about its trustworthiness; as long as it can be interpreted by the reader. Thus a person more open to new experiences will take into account more information than just the review content as due to their intellect and curiosity, they seek out corroborating information to support the claims made in the review content.

4.3.4 RQ3: Discussion

These findings are discussed prior in section 4.2.3. To summarise, there are some significant influences of individual characteristics on the reading and influence of reviews. In analysing the calculated reading behaviour alongside the personality characteristics/traits, three significant relationships are apparent.

Dispositional trust predicts gazing at both the source of the review or reviewer and the actual review. Dispositional trust has a negative relationship with gazing at the source or reviewer; those with lower dispositional trust engage in this behaviour. This suggests that higher dispositional trust; higher trust in other people, sees readers not needing to use the source to corroborate the trustworthiness of the review content. Higher trust relates to more gazes at the review content; they trust the reviewer enough to not need to investigate them, rather they trust the content written as is. Emotional stability was found to influence the amount of time spent reading the online review website. Higher emotional stability relates to more time spent on reading. This suggests that being less prone to becoming upset, or that being calmer, allows for more emotionally stable readers to continue reading all content without needing or wanting to stop.

In analysing the coded reading behaviour alongside the personal characteristics and traits, five significant influences were found. For one, scrolling and reading at the same time was found to be influenced by involvement. This suggests that the more personally involved someone is in regards to online reviews, the more likely they are to scroll and read at the same time. As higher involved people tend to be more knowledgeable in making their choices, scrolling and reading at the same time could give them this knowledge by allowing for more information to be seen and differing opinions to be gained.

A person's level of optimism can predict the reading of reviews in order. The higher a person's optimism, the more likely they are to read reviews in order. This supports the characteristics of an optimistic person in that these people favour planning and believe good things will come. Reading reviews in order coincides with these beliefs; it is a methodological or planned approach to reading and not searching out certain information coincides with the idea of good things will come to the reader. Additional to optimism, involvement can also be a significant predictor of this reading behaviour when included in the same model. This behaviour coincides with scrolling and reading; generally when scrolling and reading the reviews would be read in order as well as allowing for more information to be obtained.

Dispositional trust can significantly predict the scrolling of the entire document prior to reading. This behaviour can be explained as a corroborating behaviour, confirming to highly trusting readers that the information on the page is sufficient enough to be trusted. The thinking style of the reader can predict whether they look at the individual star ratings of each review. The more holistic a person is in the way they think, the more likely they are to look at the individual review star rating. This suggests that, as holistic thinkers tend to look and understand the overall situation, looking at the individual star rating of the reviews gives these readers an overall idea of opinions towards what is being reviewed.

Finally, how open a reader is to new experiences can predict whether they will look at the source or reviewer of each review. The more open they are, the more likely they will look at the review source. This suggests that, as openness is associated with intellect and curiosity, open readers look for more information about the review to confirm the contents trustworthiness.

Looking at the source of the review can indicate to a reader whether or not the review content should be trusted or is of any use.

These findings have significant implications for marketers and management. For one, it cannot be assumed that all people read the same and are searching for the same information. Every consumer is unique in their makeup of personal characteristics and personality traits and this needs to be considered when designing useful online review websites. These findings reveal that certain personal characteristics and traits predict different reading behaviours. As no consumer is the same, online review websites need to cater for a variety of people. As such online review websites need to allow for the differing reading behaviours to give readers the information that they are searching for easily. For example, readers who have higher levels of dispositional trust are less likely to look at the source of a review rather they rely heavily on the review's content; these readers do not need this information provided in detail on an online review website. However, those with lower dispositional trust require the details on the source of the review to be readily available as they need this to verify the content of the review.

What this suggests is that online review website owners need to know their readers. This works easily if the online reviews are a part of an online store; the retailer can target their particular audience and adjust the online review factors and their importance towards that of their customer base. However, this is a little more difficult for dedicated online review websites who cater to a larger number of readers. In this case, the online review factors need to be able to provide the information needed for all readers; that the information should be there in case a reader with a certain characteristics decides to read those reviews.

4.4 Summary

Some interesting results came about from this study. In looking at the eye-tracking experiment and the questionnaire results separately, the overall sample characteristics and reading styles become apparent. Combing the results, there are some interesting relationships. For one, it can be seen how the differing online review and website factors work together in regards to how people read and view online reviews. Secondly, it can be seen how the liking of reviews and the actual gazing or reading of reviews compare; interestingly, it appears they only coincide in certain situations. Lastly, it can be determined how individual reader characteristics influence the way they read online reviews.

By combining the two aspects of the study it is apparent there are several significant influences that individual characteristics have on the way people read online reviews. As such, these results are able to answer the three research questions in depth. This study also gives great insight into an area of marketing research which has yet to be investigated.

5. Conclusions and Implications

As a result of the mixed method study conducted; eye-tracking coding data and personal characteristic questionnaire data combined reveal that certain personal characteristics influence the way people read online reviews. Past research has largely been experimental and focuses largely on specific review factors. What is apparent from this study is that research in this area needs to take into account the actual person reading and acknowledge that each reader is different.

5.1 Research Question Conclusions

5.1.1 Research Question 1

The differing review factors work together with people gazing at numerous aspects of the review website in order to get the information that they need. Most people stop scrolling to read the review content; whilst some continue to scroll slowly whilst reading in a continuous motion. Likewise, a large number of readers tend to read the online reviews in the order by which they are presented on the website, rather than searching out particular reviews, showing the importance of review balance and sequence. People tend to look at the non-content review factors first; such as the hotel pictures or banner picture. Despite this, people tend to not look at the summary statistics first which suggests images attract the eye of readers. Around half of readers scroll the entire document prior to reading; which, along with looking at non-content factors first suggests that people like to get the overall idea of what they are reading or to 'set the scene'.

The majority of people look at the individual review star rating, hotel photos, the Also In The Area section and the individual review source (the reviewer) at some stage whilst reading the online review website. Despite this, the online review content remains to most gazed at section. This suggests that people do like to the extra information in addition to the detailed review content. In looking at the individual reviews, some are favoured more than others in both gazes and likeability. This could be influenced by two things; the sequence in which the reviews are presented and the actual review content. The first review being the first review seen by readers, could make it more likely to be read; the last review had the least number of views so it is likely readers may not have read right to the end of the document. Likewise, the second review being high in detail and length saw a greater number of gazes than the shorter, less detailed reviews.

5.1.2 Research Question 2

The liking of reviews and actual gazes do not appear to have too stronger relationship. Review 5 was the most liked review; but not the most gazed at. Rather it appears that the most liked

review in the sense that it had the least number of dislikes, received the highest number of gazes. Review 6 was the most disliked review, although it did receive a reasonable number of likes; rather than being liked or disliked it can be concluded that this review caused a reaction in readers making them form an opinion one way or another.

It was also found that gazing or reading certain online reviews can predict reading behaviour. The reading behaviours of reading online reviews in order, reading summary statistics and gazing at the individual star ratings of a review can all be predicted by which reviews the read. The fourth review in our study, the middle review, predicts the reading of reviews in order; likely due to having read to the middle of the page, it is likely the person has already been reading in order and will continue to do so. The reading of the second review on a webpage and, if that is done, the reading of the first review predicts the reading of the overall summary statistics; likely as these lie closest to the summary statistics area of the page and that these three review factors are able to set the scene of the overall situation with the product or service. Finally, the reading of the second and second to last review predicts the reading of the individual review star ratings; potentially due to these reviews specific components. Overall, it can be concluded that the most liked review in the true sense (the review with the least number of dislikes and then the highest number of likes) did receive the highest number of gazes. The same cannot be said for the most disliked review.

5.1.3 Research Question 3

There does appear to be some influence of personal characteristics or traits on the way people read online reviews. In analysing the calculated reading behaviour (gazes as a percentage of total percentages), it is apparent there are three influences of personal characteristics/traits on reading behaviour. Dispositional trust can predict whether a person gazes at the source of the individual reviews (the reviewer); a negative relationship suggesting that higher dispositional trust leads to a lower likelihood of the reader looking at the source. Those with higher trust already trust that the person writing the review is being truthful rather than needing to determine whether the reviewer is trustful enough. Dispositional trust also predicts gazing at the review content; higher dispositional trust leads to a higher number of gazes at the review content. This finding supports the above finding, suggesting that those with higher trust have enough trust in the review content alone. Finally, emotional stability predicts the time spent reading; that is higher emotional stability leads to longer reading times. This suggests that those who are less prone to becoming upset are able to read all information (be that positive or negative) without becoming distressed which allows for them to read for longer periods of time.

Analysis of the coded reading behaviour alongside the personal characteristics and traits reveals five significant positive relationships. Personal involvement in online reviews predicts a scrolling and reading (simultaneously) behaviour. The more involved someone feels they are with online reviews, the more likely they are to scroll and read at the same time; potentially due to this enabling them to gain more information quicker or due to a deeper understanding of the

reading platform. Optimism influences the reading of online reviews in order; the higher a person's level of optimism, the more likely they are to read the reviews in the order by which they are presented. Optimists favouring of planning explains this behaviour, with it being a more methodological approach to reading and an understanding that by reading the reviews how they are presented will give them the information they need.

Dispositional trust predicts the scrolling of the entire document prior to reading. This could represent a corroborating behaviour of those with higher trust ensuring that there is enough information for the opinions to be trusted. Thinking style predicts whether a reader will look at the individual star rating of the reviews, with more holistic readers engaging in this behaviour. Holistic people like to gauge the general idea of the situation and the individual review star rating allows for this to occur. Lastly, reader openness to new experiences predicts whether they will gaze at the individual review source. Openness, with its connections to intellect and curiosity, suggests that more open readers like to gain more knowledge about what it is they are reading; the review source gives them extra information about how much they should trust or value the information given in that particular review.

5.2 Conclusions About the Research Problem

In conclusion, the three research questions were answered through this study. The differing review website factors work together for readers to gain the information they need. There is some slight relationship between the liking of reviews and the actual gazes; overall showing that people have read both reviews that they like and dislike. Finally, it has been found that some reader characteristics or traits to influence the way in which they read online reviews. This is something of which needs to be accounted for in further online review research.

5.3 Contributions and Implications

5.3.1 Contributions and Implications for Theory

The findings of this research contribute greatly to the body of marketing literature. Not only is there only a small amount of online review focussed literature; what is in existence tends to focus on specific review factors using an experimental method. No study thus far has taken into account the personal characteristics or traits of the reader of online reviews.

This research contributes greatly to the understanding of reading behaviour and style in an online setting. With the continuing development of a screen based reading behaviour, it is essential we understand how it is and what influences consumer reading on this platform. Specifically, consumers are gaining in their use of online reviews for information before the purchase a product or service. Understanding how it is they use the tools for information allows

for the dissemination of marketing information that is both useful to consumers and marketers alike.

To better understand the presentation of information that consumers like, it is essential we understand review website factors. This study looked at multiple factors and how they work together, rather than studying them as separate entities. Consumers when reading online reviews do not analyse the specific review factors; they read the website as a whole. This is what this study had in mind with its design to understand better how it is consumers read reviews and what about them influences this reading behaviour.

Thus, this study incorporates the idea that consumers are all different. The finding that certain reader personal characteristics and traits influence the way in which they read is a significant contribution the marketing theory. It reveals that further research in the area of reading behaviour needs to take into account that consumers differ in their personal characteristics and personality traits and this influences the way in which they are reading. Past research focusses on the reading material and assumes that consumers are all alike in the way they read. This study reveals that this is not the case and the personal characteristics of consumers need to be taken into account when further researching in this area. Differences in reading patterns in past research could be attributed to the characteristics of the person; this needs to be acknowledged in research to come.

5.3.2 Contributions and Implications for Practice

The findings of this study could enable dedicated online review websites, or retail websites with online review components, to better template the online reviews. Instead of giving one large feedback box, they could implement different boxes with differing important components identified. This would help online review writers give the more detailed information that readers are after. This would support those with higher dispositional trust levels as these consumers focus their reading on the online review content section. Giving them the detailed information will see them not needing to look elsewhere to ensure the content is useful; they rely largely on the review content alone and giving them all the information they need in this section could allow them to make a quicker purchase decision.

Likewise, better templates for reviewer profiles could be developed to cater towards those who are higher in their openness to new experiences; who want to gain further information to ensure what they are reading is worthy of their trust. This could include information about the reviewer which signifies their expertise, their experience or even their own personal characteristics (such as location, age or family status) that could indicate to more open readers whether this information is something useful or relevant to them. Giving these consumers the added support as to trusting the review content information will allow for them to find the content more useful and in turn make a purchase decision.

Like theory, practice and management need to understand that different people read differently; just as each consumer is unique, so is their reading behaviour. In this sense, an online review website needs to cater for all readers so as they can search out the information that they require. Whether that be more information in the bulk of the review content area for consumers high in dispositional trust or more information about the review source for consumers highly open to new experiences; it is important that marketers provide or guide this information to be available. This will allow for more knowledgeable and quicker purchase decisions to be made, with hopefully less post-purchase regret for the consumer.

5.4 Limitations

A notable limitation of this study is that of the small sample size. Despite working for a qualitative based study, the smaller sample size did limit the analysis possibilities. This sample size was limited due to the time span allowed for the study to take place and the lack of willingness to participate by the student sample. This could be due to the timing by which the study was undertaking; during semester students may have been busy or more focussed on their own studies. It may have been that the incentive offered was not inviting enough to encourage participation. Next time I would look into recruiting postgraduate students. This is because they appear to be interested in research and have a more suitable school schedule that would allow more time to participate in research such as this.

This sample was also a convenience sample. Despite the benefits this had to recruitment, this style of gaining participants comes also with its own limitations. One of these limitations is that the sample is not representative of all online review users. As an educated sample, this may have influence on the personal characteristic results in regards to the overall creation of the sample. We are also not able to assume the results would be the same for a sample of differing ages, occupations or stages in life. Convenience sampling however is beneficial in that it is better suited to participants. The participants in this study chose to participate; they took part in this research of their own accord and therefore were not inconvenienced by this research. Due to the time restraints that are associated with writing a thesis, this method of sampling was suitable as it was quick. It also allowed for the insurance that participants did not where glasses (as the eye-tracker would not work with the use of glasses) and were competent reading in English. Overall, future studies should utilise larger samples and a sampling method that helps to ensure a more representative sample of online review users.

Another limitation was that of the eye-tracker device. The Grinbath eye-tracker was quite quick to consume batteries and it was also not able to identify or acknowledge when the battery power was getting low. Thus, it is possible that the battery life may have dwindled during the recording of eye movement. The eye-tracker was also susceptible to movement. Participants were instructed to keep their head a still as possible and just move their eyes over the screen. However, this is difficult to police. It is possible that the two participants who were excluded from the final data set either moved their head or moved the eye-tracking device that was placed on

their head. This would give the results of which we found in their eye-tracking recordings; little eye gaze movement captured with sporadic gazes captured. It was also for this reason that precautions were taken in what was analysed; with analysis based of recorded gaze hits and percentages of total gaze hits to minimise any limitations of the eye-tracking device.

The use of scrolling made analysis difficult and may have corrupt the data some with the noise it creates. However, scrolling was essential in creating an online review website which reflected a real world online review website. Not including the scrolling ability of the website would have influenced the data in that participants would not have read the website as they do naturally and it would have been unable to fit all of the review characteristics and different reviews on one document. Without the scrolling feature of this study, external validity would have been reduced significantly by reducing the reality of the website. Future studies should look further into scrolling; both in how in how to use scrolling in an eye-tracking study and still allow for accurate measurement and into static.

The eye-tracking study was completed in a laboratory setting. Consumers reading online reviews would normally do so in the likes of their own homes, workplaces or even whilst they were out shopping. In any of these usual cases, there would be additional distractions including background noise or interruptions from other people. The laboratory setting did not replicate this. A field setting would have given more realistic results, however, the use of an eye-tracker limited where this study could take place. A computer with the Grinbath software installed was required and movement of the participant needed to be limited. To address this limitation, I would recommend the use of a mobile eye-tracking device; the likes of which Grinbath has only recently introduced.

5.5 Further Research

In completing this study, it is evident there are several avenues of research by which it can be extended. These lie largely around the sample, the scales and the environment the research took place in. This sample was quite small; a larger sample could reveal more in-depth results and allow for differing analysis techniques to be used. Using a greater age range of participants would also extend this study to incorporate a greater age of online review users. Likewise, it would also be interesting to investigate online review writers, rather than just online review readers. Researching further into how and why it is certain people write online reviews would investigate into whether it is a certain type of person who writes reviews, and in that case whether only certain types of information is communicated to the public.

Further research could also look into whether the reading of online reviews differs from other sources of online communications. This would investigate whether certain characteristics that influence the reading of online reviews also influence the reading of blogs or forums, for example. As these all represent forms of electronic word-of-mouth (eWOM) it would be

interesting and of great use to the body of marketing knowledge to identify the commonalities of how these sources of trusted information are read and perceived.

Another interesting extension of this study could be to look into whether online reviews influence involvement; rather than the other way around. This would reveal whether online reviews make a person more involved in the product or service they are researching and could even extend into whether they are transported whilst reading. With involvement in online reviews influencing how they are read not found to be of any notable significance, it would be interesting to investigate whether involvement is important in that online reviews can contribute to creating involvement in the product or service being read about. It would also be of value to investigate whether this involvement could influence the specific product or service (or the brand) or on a broader level with the industry or product category.

This study involved a laboratory setting. Consumers read online reviews by their own accord in a setting by which they find themselves; be that at home, work or even whilst out shopping. Thus, it is suggested that further research to extend this study involve a realistic setting; a setting by which a consumer would normally find themselves reading online reviews. This has become easier now by the introduction of Grinbath's mobile eye-tracker. The eye-tracking experiment is now not limited to a laboratory setting or tied to a certain computer. Using a mobile eye-tracker, such as the Grinbath one, would allow for the eye-tracking portion of this study to be conducted in a place where consumers would normally find themselves reading online reviews.

If conducting an experiment out of the laboratory is not possible or a mobile eye-tracker is unobtainable, a more realistic setting could involve introducing background noise into the laboratory. This could be by the addition of a television playing in the background, recordings of outside noises or people talking, or even by playing music in the background. This could reveal whether external noises have an influence on the way people read reviews, or even their individual characteristics. Music in particular could influence the way in which reviews are read (be that by influencing their personal characteristics or not) and if this was found to be a positive influence, could be something introduced to online review websites.

Overall, it is apparent that past research in the area of online reviews and online reading in general has largely failed to take into account the uniqueness of consumers (readers). Consumers are made up of differing personal characteristics and traits and their reading behaviour for online reviews reflects this. Certain personal characteristics and traits can significantly predict certain reading behaviours and that certain online review website components will be gazed at. Research needs to take this into account to fully understand how and why the likes of online review websites and read and understood the way they are. It needs to be acknowledged in research that the uniqueness of consumers influences the way they read and understand certain information along with why it is certain readers favour certain types of information.

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7. Appendices

Appendix 1: Online review website used in eye-tracking experiment





Frequent Flye

Reviewer

★22 Reviews

/ 6 Helpful Votes

Always Go Here

We come to Hotel Anon every year and are also treated well by the staff. This time we got a room upgrade which made it so much easier and nicer for everyone. The washing machine and dryer were really good. I have never had a problem with cleanliness. We brought larger trash bags from home to help keep the place tidy for the cleaners. Loved the pools. The food in the restaurant was good. Will definitely be back.

Room tip: Rooms on the higher floors give better views.

0 people found this review helpful







Steven Jones England

Reviewer

25 Reviews 10 Helpful Votes

Not impressed



This hotel looks really nice from the photos but I think it is overrated. The parking available is horrible even during the off season when it is not full. The staff are unhelpful and some are just downright rude. I went to have breakfast at the restaurant one morning at 9.45am to be told that they close at 10am and that I could not be served. Not even for take-out. Let alone I stood there for 5 minutes before someone even acknowledged me! They were just so rude about it all.

Besides this, the rooms are actually quite nice. The only thing that lets this hotel down is its staff and its parking. Both were absolutely horrible.

I people found this review helpful



Management response:

J. Smith, Manager at Hotel Anon responded

Thank you for your feedback and kind comments about our rooms. We are sorry that your expectations were not met. We provide signage around our parking building for safety suggestions including turning on headlights and to back into parks. We do provide exterior parking for oversized vehicles that are difficult to maneuver into

Our restaurant is a source of pride for us, having won many awards. Your experience is very unusual and regrettable. Our management team is always on duty and we are sorry this was not addressed the same day. Guest service is our top priority and we have forwarded your notes to the restaurant staff to ensure these standards are kepthigh.

We hope you choose to stay with us again. Your comments have not been forgotten and will help us guarantee a better experience next time you stay

Thank you.



Explorer52

Top Reviewer

★41 Reviews

🧷 72 Helpful Votes

Terrible service!



We stayed here in September and made our choice based on the reviews on this site. We were supposed to stay in an ocean view room, although it had no view of the ocean. This was not too much of a worry for us though. The problems started at night when it became very noisy. The doors slamming constantly and people laughing and talking right outside our room was keeping us awake so I went out to see what was going on. There was a large family in the three bedroom suite next door to us. Although they were leaving they were having a party as they left. I asked them to keep it down as we could here everything from inside our smaller room and asked them not to slam the doors.

This continued on for another hour before I called the front desk and told them the problem. They could not move us but said they would send someone to fix the hinge on the door to stop it slamming. The next morning as new people entered the same neighbouring room, the noise picked up again. I begged the front desk to do something and they only said to try another night, so we did and it happened again.

When I complained again I was told that it was my own fault for getting the standard room and not for paying more. I was told I could check out and go elsewhere but I did not have any way to search for another hotel, nor did I know the area. After much argument I was told they could move me but I would have to pay for the "upgrade". I ended up in tears over this.

We moved that morning. During the arguments that night I had mention I had used this review site to find the hotel. The manager called me that morning to tell me that if I wasn't happy to leave the hotel. He then proceeded to threaten me to not right a review on the hotel as he would just post a response. He was threatening, scary, rude and really frightened my young son and me. I was once again in tears.

I had never had as bad an experience at any hotel that I had here. I don't recommend this hotel for anyone. I was too scared to write this review for weeks for fear that they had my details on file. Without this awful service and the awful staff the upgraded room was actually really nice. But because of the issues and the staff I would never return or recommend it to anvone!





Travel Reviewer Canada

Reviewer

☆ 10 Reviews

/ 32 Helpful Votes

They Stole from Mel



Hotel Anon lied and said that I received a service and they charged my credit card for over \$300! I never received the service!!!! The staff were so rude and unprofessional about it all. The manager said that it is my word against theirs and they say that I did receive the service and they will charge my card again if I dispute it! I will NEVER stay here again and I will be telling everyone that I can to not stay here. Worst hotel ever.

20 people found this review helpful



P. Piper

New Reviewer

☆2 Reviews

🧪 15 Helpful Votes

Not like the brochure



We have stayed at Hotel Anon for a week every summer and always book in advance. This year we were there during a public holiday. When we arrived we had to wait for our room to be ready and the lovely front desk staff recognised me from our previous stays. Two hours later the room was ready and it was the size of a closet, had no kitchen or no separate bedroom. I was outraged! This isn't like the rooms we usually have! Did they really put returning guests in a room like this?! We went to the front desk to find out why we were placed in a room like this as we thought that obviously, it was a mistake. The front desk then told me that they were fully booked and the room is what I had booked. This room was definitely NOT what I had booked and what we usually had. Staying in that tiny room and paying the same rate as a suite was completely unacceptable!!! Their website and brochure state that this is an "all suite" hotel. False advertisina 영영 Despite all this the front desk lady, Jane, was really nice! When it was apparent that there were no other rooms left she gave us information for some other resorts that might have availability and we were able to find an amazing suite at the Beachside Hotel down the road. This place was AMAZING and we will NEVER go back to Hotel Anon after staying here. Beachside Hotel had amazing accommodations and amazing food. Hotel Anon has lost our business.

🚅 12 people found this review helpful

Management response:

J. Smith, Manager at Hotel Anon responded

Thank you for your review and we apologise for the confusion that occurred during your stay. Our website clearly displays our room types with accurate photos. Whenever there is a booking, a confirmation emailstating the type of room, arrival and departure dates as well as pricing is sent to the email address provided so as if there is an issue the problem can be corrected ahead of time.

Thank you for your kind comments about our staffs efforts – this feedback has been passed on to the staff. We are happy you were able to find satisfactory accommodations and we promptly refunded your balance in full. We strive to provide the best experience for our guests and if a mistake occurs we make every effort to make it right. We truly hope visit us again at Hotel Anon.

Thank you



Intrepid Traveller Canada

Reviewer

🖈 10 Reviews

✓ ✓ 3 Helpful Votes

Great Family Hotel

I really enjoyed my first time in Myrtle Beach mainly because of Hotel Anon. We went for the long Labour Day weekend and got a 2 bedroom, 2 bathroom suite. Parking was difficult and tight. When we arrived our room wasn't ready but we were prepared for this and just had lunch and went for a swim. They provide towels for the pool and beach but whenever I went to get one the towel person wasn't there so I had to get one from the front desk instead. The indoor pool has a lazy river and they have some nice outdoor pools too. There are lounge chairs on the lawn of the property. The hotel has a Carribean feel to it and the beach is right outside. You can rent chairs and umbrellas for one day for \$30 through the lifeguard. It was expensive but you can use it all day long and they are reserved so no one will take them from you. They were also comfier than the ones the hotel has. I don't like swimming in the ocean so I stayed on the beach and used the hotel pools instead. The hotel had wifi and you could pick it up on the beach too.

Breakfast at their restaurant, the Appetite Room, was excellent. Good prices and good service. We usually went off the property for dinner though. They gave us a \$20 voucher to use toward dinner and had meal plans too for breakfast and dinner for \$35. The room had a balcony overlooking the beach but it was too hot to stay out there. The bed was comfy and the room was quiet. My daughter said her bed wasn't comfortable and her room was noisy. Hard Rock Café is nearby and so is Ripleys aquarium which is expensive. Overall I highly recommend this hotel and I would stay here again.

••• 0 people found this review helpful

Appendix 2: Blog website used in eye-tracking experiment



The Smith Family Travels

Our family vacation around the USA



Leaving SC

We have officially hit the half-way point in our road trip around America!!! Crazy to think how time flies. Just a quick stop for lunch and then back on the road for a while. For our first firm in South Carolina, it wasn't bad – but like anything there is definitely room for improvement.

Despite the hotel being pretty good for most of the trip. Hotel Anon was a bit of a pain to check out of — especially when you are toting around two irritable children who really want to get on the road to Disney World. Firstly, the front desk staff. Wow. And not in the good serse. Where the lady who checked us in was fabulous, the man on the front desk when we were checking out was rude. You could tell he just really did not want to be there. I waited in front of him for what fell like five minutes (was probably more like two though) before he even looked up from his computer. And then he tited to charge us for calls we did not makel We have cell phones that we use for that reason! Turns out he was looking up the wrong guest. And didn't even apologies. Sadly, this was a bad ending to what was a reasonably good trip! Just wish Hotel Anon had good staff on ALL the time.

Then don't get me started on the parking garage. We thought it was tight when we arrived and attempting to unpack the car. Well leaving was even wone — was like a game of hwister trying to pack the car and not hit the can next to us. Cranky kids. Cranky husband. And then I return from the front desk cranky also.

Now we hit the road again. Next stop Florida and the much anticipated Disney World!



Our SC Hotel

Time to do the usual hotel overview after our first night in SC. Hotel Anon is located in a pretty good area — its not overcrowded with other hotels, so it is not too noisy, but is amongst businesses and cafes so you are not completely isolated. So for us, thumbs up location, Quiet [so the kids can sleep], right near the beach [so less driving around and more time for relaxation] and in walking distance to the likes of shops and restaurants.

On our arrival, the check in processes was smooth and friendly! The front desk staff were lovely and recommended different areas for us to visit. Our room was a two bedroom suite – perfect sized for two adults and two kids. The kitchen area was a great addition and keeps costs lower by allowing us to cook instead of going out for every meal.

The suite was nicely furnished and the beds were reasonably comfortable. The only downside was that from the kids' bedroom you could hear the neighbours, we were worted this would keep them up last night but it seems our neighbours were out most of the night and quiet when they returned. If you are reading this Hotel Anon neighbours—THANKS!

The best part – and the whole reason we decided to stop in Myttle Beach – was the beach. So relaxing I You can even hire umbrellas and seals from the lifeguards if you so wish to do so. A little too pricey for our liking so we never bothered, but it seemed quite popular to do.

The worst part so far — the parking garage. Yes this hotel provides secure parking [awesome]] but the building is TINY. As in, we don't have the largest car in the world, it is in no way a Mini but still, and it was still a fight squeeze. Luckily we didn't have a car next to us which helped with the unloading of bags. Hint: if you stay here, you need to good at backing your car into tiny parking spots.

Overall, 3 stars out of 5 from the Smith family. Not bad, not the best, But it will do the job whilst we enjoy all that there is in Myrtle Beach.











26.08.2013

11.26pm



Hello SCI

We have arrive in Myrtle Beach! None of us have ever even stepped foot in the state before, let alone Myrtle Beach. And to make it even better we arrived on a sunny day! It was a 7 hour drive from our previous location and as such our first stop after checking in was the beach. AMAZING! It may have even just seemed better because we had been stuck inside the car all day long, but still the kids loved it!

So far, so good in Myrtle Beach. Apologies for the short post—it is late and time for bed after a timing day of driving. Will pop something up about the hotel tomorrow, after our first night as usual.





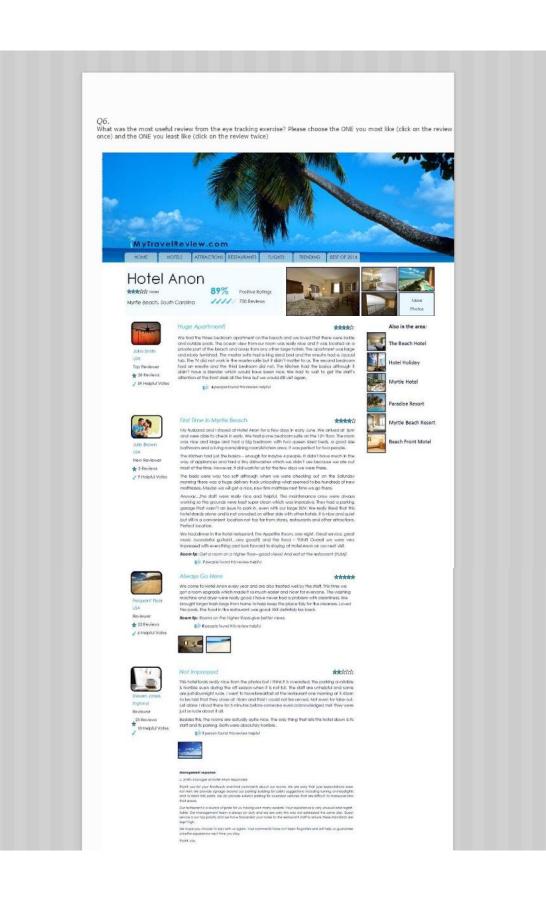
Appendix 3: Online questionnaire given to participants via Qualtrics

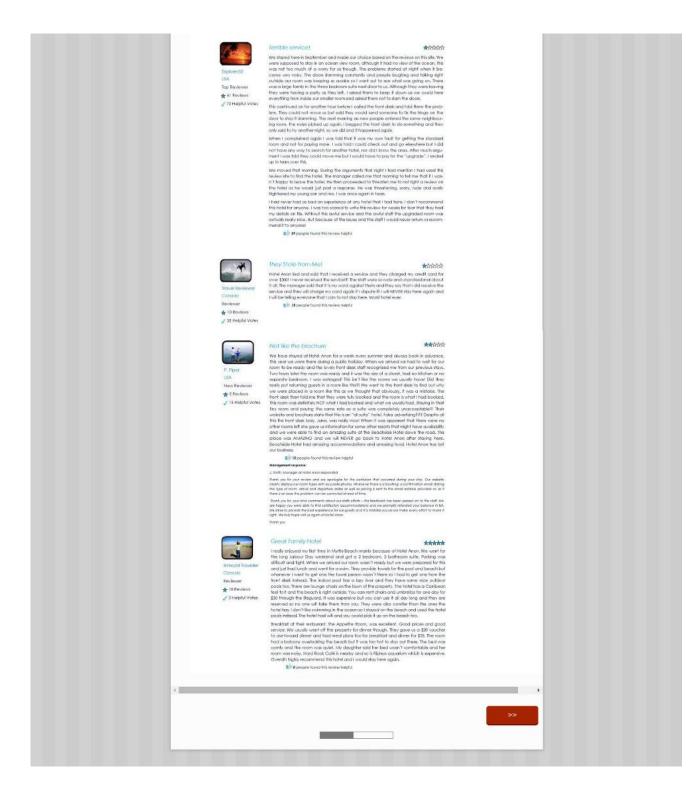
, Online Content Surv						
Thank you for particip survey below to comp statement/question a	lete your parti	cipation in th	is study. Please	e carefully	read each	
matches you best.						
Thank you for your tir						
Maree Lockie and Mar	tin Waiguny					
					>>	
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					>>	
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Q2. Please tick ONE option for ea of the following statements:	ch statement that n			rou agree or dis		
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1. In uncertain times, I usually expect the best 2. It's easy for me to relax 3. If something can go wrong for me, it will 4. I always look on the bright side of things 5. I'm always optimistic about my future 6. I enjoy my friends a lot	ch statement that n	Disagree	Neither Agree nor Disagree	Agree	sagree with each Strongly Agree	
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1. In uncertain times, I usually expect the best 2. It's easy for me to relax 3. If something can go wrong for me, it will 4. I always look on the bright side of things 5. I'm always optimistic about my future 6. I enjoy my friends a lot 7. It's important for me to keep busy 8. I hardly ever expect things to go my way 9. Things never work out the way I want them to 10. I don't get upset too easily 11. I'm a believer in the idea that "every cloud has a	Strongly Disagree	Disagree O O O O O O O O O O O O O O O O O O	Neither Agree nor Disagree	Agree	sagree with each Strongly Agree	
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1. In uncertain times, I usually expect the best 2. It's easy for me to relax 3. If something can go wrong for me, it will 4. I always look on the bright side of things 5. I'm always optimistic about my future 6. I enjoy my friends a lot 7. It's important for me to keep busy 8. I hardly ever expect things to go my way 9. Things never work out the way I want them to 10. I don't get upset too easily 11. I'm a believer in the idea that "every cloud has a silver liming"	Strongly Disagree	Disagree O O O O O O O O O O O O O O O O O O	Neither Agree nor Disagree	Agree O O O O O O O O O O O O O O O O O O	sagree with each Strongly Agree	
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	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strong Agree
I. I see myself as: Extroverted, enthusiastic	0	0	0	0	0	0	0
I see myself as: Critical, quarrelsome	0	0	0	0	0		
3. I see myself as: Dependable, self-disciplined	0	0	0	0	0	0	0
4. I see myself as: Anxious, easily upset	0		0	0	0	0	0
5. I see myself as: Open to new experiences, complex	0		0	0	0	0	0
6. I see myself as: Reserved, quiet	0	0	0	0	0	0	0
7. I see myself as: Sympathetic, warm	0	0	0	0	0	0	0
8. I see myself as: Disorganized, careless	0	0	0	0	0	0	0
9. I see myself as: Calm, emotionally stable	0	0	0	0		0	
10. I see myself as: Conventional, uncreative	0	0	0	0			0

	Strongly		Somewhat	Neither Agree nor	Somewhat		Strongly
1. Everything in the	Disagree	Disagree	Disagree	Disagree	Agree	Agree	Agree
universe is somehow related to one another	0	0			0	0	
Even a small change in any element of the universe can lead to significant alterations in other elements	0	0	•	0	•	0	0
When disagreement exists among people, they should search for ways to compromise and embrace everyone's opinions	0	0	0	0	0	0	0
4. Choosing a middle ground in an agreement should be avoided	0	0	0	0	0	0	0
5. An individual who is currently honest will stay honest in the future	0	0	0	0	0	0	
6. Current situations can change at any time	0	0	0	0	0	0	
7. It is more important to pay attention to the whole context rather than the details	0	0	•	0	0	0	0
8. We should consider the situation a person is faced with, as well as his/her personality, in order to understand ones behaviour	0	0	0	0	0	0	0

Q5. Please tick ONE option for each statement that most closely represents how characteristic each of the following statements are for you: Extremely Somewhat Uncharacteristic Uncharacteristic Somewhat Extremely Characteristic Uncertain Characteristic 1. I form opinions about everything I prefer to avoid taking extreme opinion 0 3. It is very important to me to hold strong opinions 4. I want to know exactly what is good and bad about everything 5. I often prefer to remain neutral about complex issues 6. If something does not affect me, I do not usually determine if it is good or bad Extremely Somewhat Uncharacteristic Uncharacteristic Somewhat Characteristic Uncertain 7. I enjoy strongly liking and disliking new things 8. There are many things for which I do not have a preference 9. It bothers me to remain neutral 10. I like to have strong opinions even when I am not personally involved 11. I have many more opinions than the average person 12. I would rather have a strong opinion than no opinion than no opinion at all Uncertain 13. I pay a lot of attention to whether things are good or bad 14. I only form strong opinions when I have to 15. I like to decide that 0 new things are really good or really bad 16. I am pretty much indifferent to many important issues



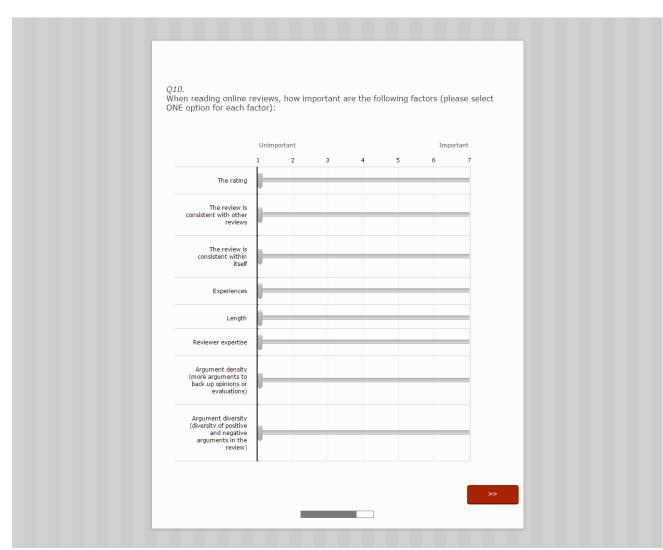


When making travel plans, online reviews are: 1 2 3 4 5 6 7 Important Boring Relevant Exiting Means nothing Means a lot to me Appealing Fascinating Worthless Involving Not needed Not needed 1 2 3 4 5 6 7 Unimportant Unimportant Unexisting Means a lot to me Unappealing Means a lot to me Unappealing Mundane Valuable Unimportant Unimportan	Q7. Please select ONE number option as to when	re or	n the	scal	es yo	ou aç	gree t	o the	e following statement:
Important Boring Relevant Exciting Means nothing Appealing Fascinating Worthless Unovolving Not needed Unimportant Interesting Irrelevant Unexciting Means a lot to me Unappealing Mundane Vorthless Unimportant Interesting Irrelevant Unexciting Means a lot to me Unappealing Mundane Vorthless Unimportant Interesting Irrelevant Unexciting Means a lot to me Unappealing Mundane Vorthless Involving Not needed	When making	g tr	ave	l pl	ans	, o	nlin	e r	eviews are:
Boring Relevant Exciting Means nothing Appealing Fascinating Worthless Involving Not needed Relevant Unexciting Means a lot to me Unappealing Mundane Vorthless Univolving Not needed Needed		1	2	3	4	5	6	7	
Relevant Exciting Means nothing Appealing Fascinating Worthless Involving Not needed Irrelevant Unexciting Means a lot to me Unappealing Mundane Valuable Uninvolving Not needed Needed	Important	0	0	0	0		0	0	Unimportant
Exciting Means nothing Appealing Fascinating Worthless Involving Not needed Discovery Control of the second of th	Boring	0	0	0	0		0	0	Interesting
Means nothing Appealing Fascinating Worthless Involving Not needed Means a lot to me Unappealing Mundane Valuable Uninvolving Not needed Means a lot to me Unappealing Mundane Valuable Uninvolving Needed	Relevant	\bigcirc	\bigcirc	0	\bigcirc				Irrelevant
Appealing Fascinating Worthless Involving Not needed Appealing Unappealing Mundane Valuable Uninvolving Not needed Valuable Uninvolving Needed	Exciting	\bigcirc	\odot	\odot	\odot	0			Unexciting
Fascinating		0	0	0	0	0	0	0	
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>>	Not needed								Needed
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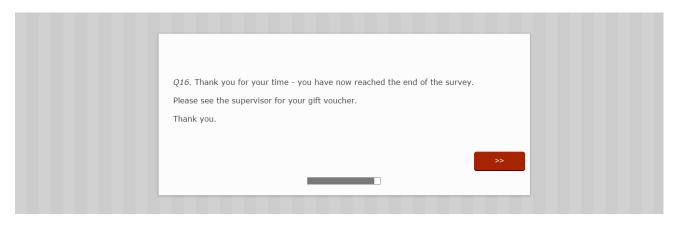
Q8. Please tick ONE option for ho	w strongly yo	u agree or dis	sagree with ea	ach of the fol	lowing statem	ents:	
	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
Most students will tell the instructor when he or she had made a mistake in adding up their score, even if the instructor had given them more points than they deserved.	•	0		•	•	0	0
If you give the average person a job to do and leave him or her to do it, the person will finish it successfully	0	0	0	0	0	0	0
3. People claim they have ethical standards regarding honesty and morality, but few people stick to them when the chips are down	0	0	0		0	0	0
4. If you want people to do a job right, you should explain things to them in great detail and supervise them closely	0	0	0	0	0	0	0
5. People usually tell the truth, even when they know they would be better off lying	0	0	0	0	0	0	0
	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
6. Most students do not cheat when taking an exam	0	0	0	0	0	0	
7. If most people could get into a movie without paying and be sure they were not seen, they would do it	0	0	0	0	0	0	0
8. Most people are not really honest for a desirable reason; they're afraid of getting caught	0		•		0	0	
9. Most people are basically honest	0	0		0	0		0
10. Most people would tell a lie if they could gain by it	0	0	0	0	0	0	0

11. If you act in good faith with people, almost all of them will reciprocate with fairness towards you 12. Most people lead clean, decent lives 13. Most people would cheat on their income tax if they had a chance 14. Nowadays people commit a lot of crimes and sins that no one else ever hears about	with people, almost all of them will reciprocate with fairness towards you 12. Most people lead clean, decent lives 13. Most people would cheat on their income tax if they had a chance 14. Nowadays people commit a lot of crimes and sins that no one else ever	with people, almost all of them will reciprocate with fairness towards you 12. Most people lead clean, decent lives 13. Most people would cheat on their income tax if they had a chance 14. Nowadays people commit a lot of crimes and sins that no one else ever		Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
decent lives 13. Most people would cheat on their income tax if they had a chance 14. Nowadays people commit a lot of crimes and sins that no one else ever	decent lives 13. Most people would cheat on their income tax if they had a chance 14. Nowadays people commit a lot of crimes and sins that no one else ever	decent lives 13. Most people would cheat on their income tax if they had a chance 14. Nowadays people commit a lot of crimes and sins that no one else ever hears about	with people, almost all of them will reciprocate with		0	0	0	0	0	0
cheat on their income tax if they had a chance 14. Nowadays people commit a lot of crimes and sins that no one else ever	cheat on their income tax if they had a chance 14. Nowadays people commit a lot of crimes and sins that no one else ever	cheat on their income tax if they had a chance 14. Nowadays people commit a lot of crimes and sins that no one else ever hears about		0	0	0	0		0	
commit a lot of crimes and sins that no one else ever	commit a lot of crimes and sins that no one else ever	commit a lot of crimes and sins that no one else ever hears about	cheat on their income tax if	0	0	0	0	0	0	
		>>	commit a lot of crimes and sins that no one else ever	0	0	0	0	0	0	0

Q9. When reading online review Name the 3 most important thin	rs, what things influence your decision about the product or servic gs you are looking for in reviews.	ce being reviewed?	
First			
Second			
Third			
		>>	



Q11. Gender:
Q12. Your current age:
Q13. What is your highest education level?
 High School Tertiary - certificate or diploma Undergraduate degree Postgraduate degree
Q14. Do you read online reviews when making a decision to purchase a product or service? (tick one) Yes Sometimes
○ No



Appendix 4: Advertisement for research participation placed in



We invite you to participate in an eyetracking study where you will read **online content** whilst wearing an eyetracking device. You yourself will not be recorded in any identifiable way.

It will only be a quick 30-45min of your time and you will be rewarded with a \$10 gift voucher!

Scan here for more information or email **eyetrackingonline@gmail.com** for more information or to sign up! Places are limited so get in quick!

AUT BUSINESS

Contact Maree (mlockie@aut.ac.nz) for further queries

Marketing, Advertising, Retailing & Sales

lifts and marketing classes

Appendix 5: Information sheet for study

Participant Information Sheet



Date Information Sheet Produced:

15 March, 2014

Project Title

How online content is read.

An Invitation

My name is Maree Lockie and I invite you to participate in my research surrounding how online content is read. This research will contribute to a thesis as a part of the Master of Business qualification at Auckland University of Technology (AUT). Participation is voluntary and should you choose to participate you are welcome to withdraw at any time prior to the completion of data collection should you wish to do so.

What is the purpose of this research?

The purpose of this research is to provide insight into how people read online content and this will contribute to a thesis of which will fulfil the requirements for me to obtain the Master of Business qualification. This research will also be used to create a conference paper and a journal article.

How was I identified and why am I being invited to participate in this research?

This research requires participants, both male and female, who are students of AUT. The selection process involved responding to the advertisements (be that the posters in the WF building lifts or in class). People who were excluded from this research were those who wear eyeglasses as the eyetracking device used in this research is not compatible with eyeglasses.

What will happen in this research?

This research looks into how people read online content and will take place at AUT in a laboratory. You will be fitted with the eyetracking device and then required to read online content. For this, participants are required to wear an eyetracking device which sits on the forehead and secured around the head, which will record via a small camera where your eye is gazing to tell us how you read the sample online content. The eyetracking device will record your eye movements whilst you are reading and the computer screen. The eyetracking device does not record you; it only records what is on the computer screen and where your eye is looking. Observation is only taken of how you are reading, not you personally. As such, your privacy is obtained; no identifiable data will be recorded for the purpose of this research. Once this is completed, you will fill out an electronic survey about your personality and personal characteristics.

What are the discomforts and risks?

There are no significant risks apparent in this research. The eyetracking device will be sanitised after each use with sanitising wipes.

How will these discomforts and risks be alleviated?

Should any discomfort arise during the research, you are welcome to stop participating at any time. The eyetracking device will also be wiped down with sanitising wipes after each use.

What are the benefits?

The benefit of this research is that it will identify how it is people read online content, which in turn could see better developed online content that is more suited towards readers. It will also give you insight into how you how it is you read online content. Finally, this research will assist me in gaining my Master of Business qualification.

How will my privacy be protected?

The eyetracking device does not record any identifiable information of you; it only records what is showing on the computer screen and where your eye is travelling. No audio will be recorded. The survey will also require no identifiable information. Consent forms will be stored in a secure location and destroyed after six years and your information on the consent forms will only be seen by myself and my supervising researcher, Dr. Martin Waiguny.

What are the costs of participating in this research?

This research requires approximately 30-45 minutes to complete. This includes both the eyetracking exercise and the accompanying survey.

What opportunity do I have to consider this invitation?

You have two weeks to consider this invitation.

How do I agree to participate in this research?

You agree to participate in this research by signing the consent form.

Will I receive feedback on the results of this research?

You can choose to receive feedback on the results of this research. To do so, you will need to provide me with an email address (on the consent form) in order for the results of the research to be sent out to you. This email address will not be used for any other purpose.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr. Martin Waiguny, martin.waiguny@aut.ac.nz, 09 921-9721 Ext. 5069

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, ethics @aut.ac.nz, 921 9999 ext 6038.

Whom do I contact for further information about this research?

Researcher Contact Details:

Maree Lockie, maree.lockie@aut.ac.nz

Project Supervisor Contact Details:

Dr. Martin Waiguny, martin.waiguny@aut.ac.nz, 09 921-9721 Ext. 5069

Approved by the Auckland University of Technology Ethics Committee on 17 June 2014, AUTEC Reference number 14/99.

Consent Form

How Online Content Is Read

Project title:

Date:



Project	Supervisor:	Dr. Martin Waiguny	
Resear	cher:	Maree Lockie	
0	I have read and un Sheet dated 15 Ma	derstood the information provided about this research project in the Information 2014.	n
0	I have had an oppo	ortunity to ask questions and to have them answered.	
0		may withdraw myself or any information that I have provided for this project ompletion of data collection, without being disadvantaged in any way.	at
0	If I withdraw, I und thereof, will be des	derstand that all relevant information including tapes and transcripts, or par troyed.	ts
0	I agree to take part	t in this research.	
0	I wish to receive a	copy of the report from the research (please tick one): Yes O No O	
Participa		signatur	e:
Participa	ant's	nam	e:
Dantiain.		(the manager of another all forces the anapparent).	
Рапісіра	ant's email address	(to receive feedback from the research):	

Approved by the Auckland University of Technology Ethics Committee on 17 June, 2014 AUTEC Reference number 14/99

Note: The Participant should retain a copy of this form.

Appendix 7: AUT Ethics approval



17 June 2014

Martin Waiguny Faculty of Business and Law

Dear Martin

Re Ethics Application: 14/99 How online reviews are read.

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 16 June 2017.

I have also approved the minor amendment to allow recruitment on AUT campus.

As part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through http://www.aut.ac.nz/researchethics.
 When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 16 June 2017;
- A brief report on the status of the project using form EA3, which is available online through http://www.aut.ac.nz/researchethics. This report is to be submitted either when the approval expires on 16 June 2017 or on completion of the project.

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to obtain this. If your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply there.

All the very best with your research,

Kate O'Connor

Executive Secretary

Auckland University of Technology Ethics Committee

1 Course

Cc: Maree Lockie mareealockie@gmail.com

Appendix 8: Observation protocol

Ethics Application: 14/99 How online reviews are read.

Observation Protocol

How people will be recruited?

Participants will be recruited from AUT students on the AUT campus. Invitations will be passed out in classes and advertisements inviting people to participate will be placed in the AUT WF Building lifts (subject to AUT Business school approval). Students will not be recruited from Martin Waiguny or my own classes

How people will be informed about the observation?

People will be informed of the observation in the information sheet and when inviting students to participate.

How people will consent to the observation?

People will consent to the observation by agreeing to participate in the study (accepting the invitation) and signing the consent form. The information sheet states that participant's eye movements (how they read) will be observed and this will also be stated during the invitation process.

What will be observed and what data will be collected?

Participant's eye movements will be observed; how they actually read the online content will be observed. No identifiable characteristics will be recorded so as to ensure participant anonymity. No observations other than the eye movement will be recorded. Recordings of eye movement and the computer screen will later be electronically analysed as well as coded by the researchers. Participants will be identified by a code; not by their name or any identifiable characteristic.

How the data will be collected?

Data will be collected through the eyetracking device. The device only records the eye movement on the screen; no identifiable information about the participant will be recorded. This data is then loaded onto software to be analysed. After the eyetracking study a survey will be implemented to record information about the respondent's personality. No observations other than the eye movement will be recorded. Participants will be identified by a code; not by their name or any identifiable characteristic.

How any deception involved will be managed;

Participants will not be told that the research is specifically looking at online reviews, rather they will be informed that the research involves looking at how online content as a whole is read. This will stop any bias towards online reviews occurring. Participants will then be briefed at the conclusion of the study as to how this research was specifically looking at online reviews.

The data collection instrument.

The data collection instrument is an eyetracking device. It is fitted with a small camera which records the eye movement of the participant. Observations occur solely in the eye movements on the screen. Nothing that could identify the participant will be recorded; only the eye movement and the computer screen will be recorded.

Appendix 9: Coding for all participants of eye-tracking data

PARTICIPANT ID	SEQUENCE + CODES																	
01	hotel name	scan page	header pic	skim first review	header pic	hotel name	quick scroll down up	header pic	hotel photos	skim r1	r1 title	r1	r1 source	r1	scroll r2	r2	r2 source	r2
03	header pic	hotel photos	r1 & r2 rating	hotel photos (focus on "more photos")	scroll little	r1 quick	scroll r2	glance down page	r2	quick scroll down up top	scroll down	r6 quick	scroll down up top	glance left right left over page				
06	r1 rating	also in area	header pic	sum stats glance	r1 + helpful	quick scroll down up top	r1 title	r1	also in area	scroll down	r3 rating	r4 rating	r4 source	r4 rating	r4 source	scan r4	scroll man resp	r4
07	header pic	glance screen	hotel photos	header pic	scroll down up	header pic	hotel photos	scroll r1	r1	scroll down little	r1 start read + glance over	r1 source	r1 glance top bottom	scroll r2	r2 rating r3 rating	r2read top	scroll r3	r4 man resp glance
09	hotel name	hotel photos	header pic	hotel photos	sum stats	also in area	r1 top + rating	scroll bottom	r7 glance	r8 source glance	scroll top slow	sum stats	hotel photos	also in area	r1 rating	r1	r2 top quick	r1
10	header pic	sum stats	hotel photos	website name	header pic	sum stats	hotel photos	header pic	sum stats (hotel name)	scroll bottom	r7 bottom quick read	scroll r2 bottom	r2 last paragraph	r2 helpfulness	r3 source photo	scroll down up r1	bottom hotel photos	also in area
11	header pic	hotel photos	header pic	scroll slow then quick while looking at reviews to bottom	scroll top	sum stats hotel name	scroll r1	r1 glance over	scroll mid r2	r2	click r3 photos	scroll sum stats	scroll mid r2	r2 bottom	r3 glance over	scroll mid r3	r3 r4 glance	r3 helpfulness and photos
12	r1	r1 title + rating glance	header pic	also in area	hotel photos	sum stats	r1	r1 rating	hotel photos	sum stats	r1	r1 rating	hotel photos	r1	scroll bottom	scroll top	scroll r1 whilst look at also in area	r1
13	glance over screen	hotel photos	summary stats	hotel photos	scroll top header tabs	r1 source	scroll & look at r2 source and also in area	scroll r2	r2	scroll bottom r2 photo + read	scroll summary stats	glance r2 whilst scroll r3	r4	r3	r4	r3 + helpful rating	scroll r4	r4 source + management response
15	summary stats	also in area	header pic	r1 glance	hotel photos	scroll + look at r1 + source	scroll whilst glance reviews	pause at r3 r4 photos	pause r5 read	scroll bottom whilst gaze at reviews	scroll top		scroll down	r2 + source	scroll down whilst look at sources especially r4 source	stop r5		
16	summary stats	hotel photos	r1 glance	summary stats focus on positive ratings	hotel photos	r1 glance	scroll down up to r1	r1r1 source	scroll r2	r2	scroll down keep reading r2	r2 helpfulness	r3 glance	r2 glance	r3 + photo	scroll top	hotel photos	scroll mid r5
17	summary stats	header pic	hotel photos quick	also in area	summary stats glance	glance r1	summary stats	hotel photos	r1 rating	scroll down up	header pic	hotel name	hotel photos	also in area	hotel photos	summary stats	r2 source photo	summary stats
18	r1 source	also in area	r2 rating/r2 glance	hotel photos	header pic	hotel photos	header pic	summary stats glance	hotel photos glance	header pic	scroll down up top	header pic	scroll down whilst look at r2 rating and also in area	scroll summary stats	r1	hotel photos	r1	summary stats
21	summary stats	also in area	header pic	quick look down screen	sum stats	header pic	summary stats	hotel photos	sum stats	scroll mid r1	glance then scroll r1	r1	r2	scroll up	summary stats	scroll r2 r3	r2	r3
22	header pic	sum stats focus positive ratings	hotel photos	also in area	r2 r1 source	scroll bottom top	r1 title	hotel photos	r1	scroll r1	r2 source	r1 source	r2 source	r2	scroll down up bottom r2	r2 helpful	r3 title	r3 source

24	summary stats	header pic	r1 source	r2 source	r1 glance	r2 r1 source	r1 start	hotel photos	sum stats	hotel photos	scroll top hotel photos whilst read r2	r1	r1 source	r2 source	r1 source helpful	r1	hotel photos	r2 source
25	header pic	summary stats	hotel photos	scroll down up top	hotel photos	summary stats	hotel photos	summary stats	hotel photos	r1 + also in area scan	r1	scroll mid r1	r1scroll + read r2	scroll down up top	r1 helpful	scroll mid r2 + scan	r2 + slow scroll	scroll bottom top r5
26	r1 scan	header pic	r2 scan	header pic	summary stats	r1 look over	r2 look over top	scan page bottom top	scroll little	summary stats	r1 source	scroll little	r1 source	r1 quick	summary stats	hotel photos	r1 quick + source	scroll r2
27	scan page	also in area	summary stats	r1 source	slow scroll whilst glance r2 r1	scroll r5	r5	scroll down whilst glance r6 r7	scroll bottom	r8 look over	scroll top	hotel photos	r1	r1 source	scroll r5	r5 look over	scroll r6	r7 quick
30	r1	scroll bottom top	r1 look	also in area	hotel photos	summary stats	hotel photos	r1 source	scroll top summary stats	r1 + also in area scan	scroll top	hotel photos	scroll r1 mid whilst glance r2 r3	r2 + room tip + helpful	scroll r2 mid glance r3 r4	r3	scroll top	hotel photos
32	header pic	hotel photos	scroll top summary stats	hotel photos	scroll down slow glance over page	scroll mid r2	glance page + r4 source	scroll r3	r3 rating	scroll r4	r4 rating + glance over	scroll r4 management response	glance over management response + r5	scroll r6	glance over page	r6 look over	scroll bottom whilst glance over screen	scroll top
33	summary stats	header pic	r1 scan down	glance around screen	summary stats	hotel photos	back and forth between summary stats and hotel photos	scroll summary stats whilst look at hotel photos	summary stats	hotel photos	also in area	scroll r1 and glance over screen	scroll top	scroll r1	r2	scroll bottom	scroll r5	scroll bottom top
34	r2 title	r1 scan	r1 source	r2 source	r1 r2 scan	scroll summary stats	r2	scroll top	r1 source	r2 source	slow scroll whilst read r2	r3 source	scroll top summary stats	r2	r2 source	r2	scroll r3	r3 source + glance r3
35	r1	also in area	scroll bottom	r7 r8 glance	scroll top	r2 top	r1	scroll middle and scan screen	scroll top	scroll r1	r2	r3	r3 photos	r4 source	r3 photos	r3	r4 + man response	scroll r5
36	hotel photos	summary stats	glance r1 to also in area	r2 glance over rating to hotel photos	also in area	hotel photos	also in area	summary stats	also in area	r1 rating	also in are to hotel photos	slow scroll whilst look at also in area and hotel photos	scroll r2	scroll top	r1 rating	r2 rating	r1 rating	hotel photos
37	header pic	hotel photos	summary stats	header pic	hotel photos	header pic	summary stats	slow scroll whilst read r1 r2 r3 + photos r4 r5	scroll top	header pic	summary stats	scroll bottom	r7 man response	slow scroll up and pause mid r4	scroll top	header pic and hotel photos glance		
39	r2 scan	also in area	r2 rating	r2 source	also in area	scroll down and top	r2 rating	also in area	r2	r1	r1 source	also in area	r2 + source scan	scroll down up top down r3	r4 man response	scroll r7	r7 man response	scroll bottom and scan
42	summary stats	r1 title	r1 rating	r1	scroll r2	r2	scroll r3	r3 source	r2 room tip and helpful	r3	scroll r4	r4	r4 photo	scroll mid r4	r4 man response	scroll r5	r5 + helpful	scroll r6
47	header pic	glance over page	scroll bottom top bottom		scroll r2	scroll r3	r3 glance top	scroll r4	scroll r5	glance down up down	scroll little glance over r5	scroll r7	scroll slow bottom	r7 bottom	scroll top			
08	glance over screen	scroll r5	scroll bottom top	scroll up down up down up down	click hotel photos	scroll r3	scroll r5											

Sequence continued.

PARTICIPAN T ID	CONTINUE	E + CODES																	
01	scroll r3	r3 quick	r3 helpfulnes s	click r3 photos	scroll r4	r4 + man resp	scroll r5	r5 title	r5 read thorough (focus "slam doors" and "beg front desk"	scroll finish r5 + r6 glance	scroll bottom								
03																			
06	scroll r6 r5 r6	r6	r7 quick	scroll r8	r8	scroll top	r1 skim	also in area	hotel photos	sum stats	r1 source	scroll and look sources	r2 skim + room tip	r3 rating	slow scroll + sources to bottom	scroll top	r1 skim	sum stats skim	r1 quick
07	scroll r1	glance down up r2	scroll mid r2	r2	scroll r5 r4	glance top r5	scroll mid r2 glance	scroll r3	glance r3	r3	glance screen	scroll r4 skim	scroll down and glance screen	scroll up r5 glance top	r5 quick	scroll r6 glance source	r7 skim + source	scroll bottom	glance r7 r8
09	scroll r2 slow	r2	scroll top	hotel photos	scroll r4	r4 title	scroll r2	r2	scroll slow down whilst read r2	r2 helpful	r3 rating	r3	scroll r4	r3 photos	r4	scroll r5	r5 quick	r4 man respons e	r4 photo
10	scroll down up top	header pic	hotel photos quick	scroll r2	r2 quick	r2 helpfulness	r3	scroll r3	r3 bottom + photos		scroll r4 photo look	scroll r2	r2 glance + room tip and helpfulnes	scroll r3	r3 helpfulness and photos	scroll slow pause r4 look at photo	scroll mid r6	r7	scroll bottom
11	r4 glance	r4 source	slow scroll down r4	pause r4 read + man respons e	scroll r5	r5 quick whilst scroll	scroll r6 top	r6	r6 source	r7 start	r7 source	r7	r7 man response	scroll top	header pic	scroll mid page			
12	scroll mid r2	r2	r2 helpfulnes s	scroll r3	r3 + quick r4	scroll r5	r5	scroll mid r5	cont. r5	r6 glance	scroll r7	r7	scroll bottom	cont r7	scroll up whilst glance over screen	scroll bottom			
13	scroll r4 photo	r4 + managemen t response	scroll r5	r5 quick	scroll bottom whilst look at r6 rating and review	r7 scan management response	scroll top whilst look r6 source + r5	r1 glance											
15	_		_					_						_					
16	r5	scroll r4 managemen t response	r5	scroll down read r5	scroll r6	r6	scroll + read r7	r7 managemen t response	r8	scroll r8	r7 managemen t response	r7	scroll bottom	r7 managemen t response	glance r8	scroll top	header pic	also in area	
17	hotel photos	header pic	scroll r1	r1	r2 source	r2	scroll mid r2 read	scroll r3	r3 source	r3 + photos	r4	scroll mid r4 + managemen t response	r5	scroll r5 glance over	scroll r6	scroll bottom r5 source photo	r5scrol I down whilst read r5	scroll r7	r7
18	hotel photos	slow scroll while glance r2	r2 source	r1 source	r2 source	also in area while scroll	slow scroll whilst glance bottom r1 and start r2	scroll r2	r2	slow scroll r4 + r3 rating	r3 quick while scroll slow	ause r3 photos	r4	r4 managemen t response whilst scroll	r5 + scroll	r7 + scroll	quick look r6 r5	r6 quick + helpful	r7 scan
21	scroll r3	r3 + source	r4	scroll r6	r6 start	r6 r7 source	scroll bottom	r7 bottom + managemen t response	r7 glance	scroll top	header pic	hotel photos							
22	r3 rating	r3r4 source	scroll down up r3	r3	r4 quick	scroll r2 down r4 (managemen t response glance) bottom r3	r4 + managemen t response	scroll r5	r5 source	r5	scroll top	header pic	r1 glance	scroll r6	r6 quick + managemen t response	scroll r5	r5r6	scroll r6 read	r7
24	r2	r1 source	scroll top bottom	scroll bottom	r7	scroll top down bottom	r4 managemen	scroll mid/top r5	r6 + source	scroll top	hotel photos	r1 glance	hotel photos	summary stats glance	scroll bottom	r8 start	r8 source	r8	r7 manageme

				r5		r2	t response start							+ header					t response quick
25	slow scroll top whilst scan reviews	scroll top r3	r3 scan + photos	r3	scroll top r3 photos + look	scroll mid r4	r4 + managemen t response (scroll read)	slow scroll + r4 r5 read	r5 rating	r6 glance	r5	scroll bottom up mid r5	r5	scroll r6	r6	r6 rating	r6 source	r6	slow scroll scan page
26	r2	r3 glance	r3 source	r3 room tip	r2 glance up down	scroll r3 whilst look at r3 source	r3	scroll r2	scroll r3	r3 photo	r3 room tip	scroll r3 photos whilst look at r4 source	r4	r4 star rating r4	scroll mid r4	r4 man respons e	scroll bottom top r5	r5	scroll little to continue r5 (read top third of screen)
27	scroll top	also in area	r1 quick																
30	scroll r3	r4 + man response	scroll up slow whilst glance r4 source + also in area																
32	header pic	hotel photos																	
33	summar y stats	r1 glance down	scroll r2 and glance over	scroll top bottom	scroll r4 and glance over	scroll r2	scroll r3	r3 glance and review photos	scroll r4	r4 glance and review photos	scroll mid r5	r6 r7 glance over	scroll r7	r7 managemen t response	scroll bottom	r8 scan	scroll r1	r1 glance	r2 scan + source
34	scroll r5	r5 + source	scroll and glance r6	scroll r7	r7 source	r7 scan management response	r7 source	scroll bottom	r8 glance over										
35	r5	scroll mid r5	r7 quick	scroll r7	r7 man respons e	scroll bottom	r8	scroll top	glance summar y stats to r1	scroll r1	r1 r2 quick read	scroll and pause r3	r3 scan	r4 scan	scroll bottom	scroll up whilst scan r7	scroll up pause r5	r5 scan	scroll top whilst scan reviews
36	r1 rating	summary stats	header pic	hotel photos	r1 rating	scroll bottom whilst scan reviews and sources	scroll top	scroll r6	r6 source	scroll top	r1 rating	hotel photos	summary stats	scroll r1	r1 source	r2 source	r2 room tip	scrollr3	r4 man response
37			•	h l		•			.4						-0	0 7	-		-5 - 1d
39	scroll up top slow whilst scan reviews and ratings	also in area	r2	hotel photos	r1 scan	r2 + source	scroll r3	r3 + photos	r4 + man respons e	scroll little to finish r4 man respons e	r5 + scroll to continue reading	scroll r6	r7 man response	scroll bottom	r8	scroll r7	r7 skim + source	scroll r5	r5 quick
42	r6	scroll r7	r7	scroll bottom	r7 bottom + man respons e	r8													
47																			
08																			

Sequence continued.

PARTICIPANT ID	CONTINUED SEC	QUENCE +									
01											
03											
06		r1 + top r2+ r1	also in area	scroll + hotel photos	r2	scroll r3					

07	scroll top	glance hear pic r1	scroll r1	r2 glance + source	scroll + quick read r2	scroll + glance r5														
09	r4 source	scroll r1	r1 source	r1 helpfulness	scroll top bottom whilst look at reviews	scroll r3	r3 title	r3 photos	r4 rating	r4 title	scroll down whilst read r4 man response	scroll r5	r5 source	r5 title	r5 rating	r5 thorough	scroll bottom	r7 glance	r7 man response	r8 top half
10	r7	r7 man response quick	r7 quick	r7 man response	scroll top bottom whilst look at reviews	header pic	hotel photos													
11																				
12																				
13 15																				
16																				
17	scroll whilst	scroll	glance r7	r7scroll top	header pic															
	read r7	bottom	management response	•	neader pie															
18	r7 rating + quick read	r8 title	r7 glance	r8																
21			-			-0	0	L d	0											
22	r6 source	scroll r7	r7	scroll bottom	r7 + management response	r8	scroll top	header pic + summary stats	scroll whilst look at reviews											
24																				
25	r7 + management response	slow scroll read r7 + r8 to bottom	r7 glance	r7 management response	scroll top bottom	r7 management response glance	r8 glance													
26	slow scroll through r5 to r6	r6	scroll r7	r7 title + scan down	r8 scan + source	r7 rating	r7 + slow scroll	scroll bottom	r7 bottom + helpful + man response	r7 scan + man response	r8 title	r8 glance source	r8 + helpful + source	scroll top	summary stats	r1 glance + source	scroll down whilst look revs + source	pause r3 - source + rev. photos	scroll bottom scan r7 + man response	
27																	Jouree			
30																				
32																				
33																				
34																				
35	summary stats	r1 source	r1 scan									_								
36	r4 source	slow scroll whilst read man response	scroll mid r4 man response	r4 man response	scroll r6	r6 + source	scroll bottom	scrollr5	r5 glance	r6	scroll bottom	r7 man response glance	r8							
37		•																		
39	scroll r3	r3 r4 quick	scroll top and glance over																	
42																				
47																				
80																				

Coding (numbers)

PARTICIP ANT ID	TIME	SECONDS	STOP_TO_READ	SCROLL_AND_RE AD	READ_REVIEWS_ IN_ORDER	LOOK_REVIEWS_ FIRST	HOTEL_PICTURES _FIRST	HOTEL_PICTURES _FIRST	SUMMARY_STAT S_FIRST	SCROLL_DOCUM ENT_BEFORE_RE ADING	RATINGS	HOTEL_PHOTOS	SOURCE
			1 Yes 0 No	1 Yes 0 No	1 Yes 0 No	1 Yes 0 No	1 Yes 0 No	1 Yes 0 No	1 Yes 0 No	1 Yes 0 No	1 Yes 0 No	1 Yes 0 No	1 Yes 0 No
01	05:21.68	321.68	1	1	1	0	0	0	0	1	0	1	1

06 023958 19958 1														
07 025126 17126 1 1 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1	03	02:41.86	161.86	1	0	0	0	1	1	0	0	1	1	0
09 04.27.10 287.10 1	06	02:39.58	159.58	1	0	0	1	0	0	0	1	1	1	1
10 03:05:2 180:52 1 0 0 0 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1	07	02:51.26	171.26	1	1	0	0	1	1	0	1	1	1	1
11 0734.48 454.48 1 1 1 1 1 0 1 1 1 0 0 1 1 0 1 1 1 0 1	09	04:27.10	267.10	1	1	0	0	0	0	0	1	1	1	1
12 0523.44 323.44 1 0 0 1 1 1 0 0 0 0 0 1 1 1 1 1 0 0 0 1	10	03:00.52	180.52	1	0	0	0	1	1	0	1	1	1	1
13 01:27:00 87:00 1 1 1 0 0 0 1 0 0 1 0 0 0 1 1 1 0 1	11	07:34.48	454.48	1	1	1	0	1	1	0	1	0	1	1
15 01:04.86 64.86 0 1 1 1 0 0 0 0 1 0 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 1 0 0 1	12	05:23.44	323.44	1	0	1	1	0	0	0	1	1	1	0
16 04:19:22 259:22 1 1 1 1 1 0 1 0 1 0 1 1 0 1 1 1 0 1	13	01:27.00	87.00	1	1	0	0	1	0	0	0	1	1	1
17 02:52.74 172.74 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 1 1	15	01:04.86	64.86	0	1	1	0	0	0	1	0	0	1	1
18 03:36:40 216:40 1 1 1 1 0 0 0 1	16	04:19.22	259.22	1	1	1	0	1	0	1	1	0	1	1
21 04:02:22 242:22 1 0 1 0 0 1 0 0 1 0 1 1 2 22 05:40:92 340:92 1 0 1 0 1	17	02:52.74	172.74	1	1	1	0	1	0	1	1	1	1	1
22 05:40:92 340:92 1 0 1 0 1 0 0 0 0 0 1 1 1 1 1 1 0 0 0 0 0 0 0 1 1 1 1 1 0 0 0 0 0 0 0 0 0 1	18	03:36.40	216.40	1	1	1	1	0	0	0	1	1	1	1
24 03:39:50 219:50 1 1 0 0 0 0 1 0 1 2 2 1 1 1 1 1 1 1 1 1 2 2 1 1 1 0 0 0 0 0 0 1 1 1 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 2	21	04:02.22	242.22	1	0	1	0	0	0	1	0	0	1	1
25 11:03.74 663.74 1 1 1 1 1 0 0 1 1 1 0 0 0 1 1 1 1 2 2 2 2	22	05:40.92	340.92	1	0	1	0	1	1	0	1	1	1	1
26 11:25.36 685.36 1 0 1 1 0 0 0 0 0 0 1	24	03:39.50	219.50	1	1	0	0	0	0	1	0	1	1	1
27 01:42.60 10:60 1 1 0 0 0 0 0 0 0 0 0 0 0 0 1 <	25	11:03.74	663.74	1	1	1	0	1	1	0	0	1	1	1
30 03:07.00 187.24 1 0 0 1 1 0 0 0 0 0 1 0 1 0 1 1 1 0 1 1 1 1 0 1	26	11:25.36	685.36	1	0	1	1	0	0	0	0	1	1	1
32 03:09.20 189.20 1 0 1 1 0 0 1	27	01:42.60	102.60	1	1	0	0	0	0	0	0	0	1	1
33 04:07.08 247.08 1 0 1 0 0 0 1 1 0 1 1 34 01:32.10 92.10 1 1 1 1 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 <td< th=""><th>30</th><th>03:07.00</th><th>187.24</th><th>1</th><th>0</th><th>1</th><th>1</th><th>0</th><th>0</th><th>0</th><th>1</th><th>0</th><th>1</th><th>1</th></td<>	30	03:07.00	187.24	1	0	1	1	0	0	0	1	0	1	1
34 01:32.10 92.10 1 1 1 1 0 <	32	03:09.20	189.20	1	0	1	0	1	1	0	0	1	1	1
35 04:07.16 247.16 1 0 1 1 0 0 0 0 1 0	33	04:07.08	247.08	1	0	1	0	0	0	1	1	0	1	1
36 02:16.50 136.50 1 0 0 0 1 1 0 1	34	01:32.10	92.10	1	1	1	1	0	0	0	0	0	0	1
37 02:15.28 135.28 0 1 1 1 0 1 1 0 0 0 0 1 1 0 0 1 39 02:58.14 178.14 1 0 0 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1 1	35	04:07.16	247.16	1	0	1	1	0	0	0	1	0	0	1
39 02:58.14 178.14 1 0 0 1 0 0 1 1 1 1 1 42 05:31.84 331.84 1 0 1 0 0 0 1 0 1 0 1 47 07:00.80 420.80	36	02:16.50	136.50	1	0	0	0	1	1	0	1	1	1	1
42 05:31.84 331.84 1 0 1 0 0 0 0 1 0 1 0 1 0 1 47 07:00.80 420.80	37	02:15.28	135.28	0	1	1	0	1	1	0	0	0	1	0
47 07:00.80 420.80	39	02:58.14	178.14	1	0	0	1	0	0	0	1	1	1	1
	42	05:31.84	331.84	1	0	1	0	0	0	1	0	1	0	1
00 04 40 00 40 00	47	07:00.80	420.80											
U8 01:46.88 106.88	08	01:46.88	106.88											

PARTICIPANT ID	Source_Hits	Review_Hits	Rating_Hits	Also_in_area_hits	General_Hits	Review 1	Review 2	Review 3	Review 4	Review 5	Review 6	Review 7	Review 8
01	920	7865	477	337	8949	1	1	1	1	1	0	0	0
03	458	2417	575	249	2951	1	1	0	0	0	1	0	0
06	659	5023	1602	824	5705	1	1	0	1	0	1	1	1

09 311 10502 4032 3112 10820 1 1 1 1 1 1 0 1 1 10 1998 5934 1130 784 7988 0 1 1 0 0 0 1 0 11 911 3440 847 572 4367 1 0<	07	212	2326	882	673	2559	1	1	1	1	1	1	1	1
10														
11 911 3440 847 572 4367 1														
12 26 14564 9310 7199 14590 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1														
13 755 2514 849 737 3292 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 1 0 1														
15 338 1323 427 374 1662 1 1 0 0 1 0 0 1 0 0 1 0 0 1														
16 331 11669 6442 5048 12009 1 1 1 0 1														
17 721 4792 540 410 5545 1														
18 186 8638 2267 1339 8828 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1														
21 1218 9519 1677 1327 10779 1 1 1 0 1 1 0 22 2121 13723 1950 1474 15939 1														
22 2121 13723 1950 1474 15939 1														
24 1797 8914 1286 667 10773 1 1 0 1 0 1 1 1 25 2858 17213 4420 2636 20163 1							1	1	1	1	0	1	1	0
25 2858 17213 4420 2636 20163 1	22	2121	13723	1950	1474	15939	1	1	1	1	1	1	1	1
26 4500 21914 4324 2501 26565 1	24	1797	8914	1286	667	10773	1	1	0	1	0	1	1	1
27 310 1457 918 838 1795 1 1 0 0 1 1 1 1 30 302 6360 2641 1743 6678 1 1 1 1 0 0 0 0 0 32 68 5262 4704 4027 5334 0 0 0 1 1 1 0 0 33 380 4398 2297 2046 4805 1 <	25	2858	17213	4420	2636	20163	1	1	1	1	1	1	1	1
30 302 6360 2641 1743 6678 1 1 1 1 0 0 0 0 32 68 5262 4704 4027 5334 0 0 0 1 1 1 1 0 0 33 380 4398 2297 2046 4805 1	26	4500	21914	4324	2501	26565	1	1	1	1	1	1	1	1
32 68 5262 4704 4027 5334 0 0 0 1 1 1 0 0 33 380 4398 2297 2046 4805 1	27	310	1457	918	838	1795	1	1	0	0	1	1	1	1
33 380 4398 2297 2046 4805 1	30	302	6360	2641	1743	6678	1	1	1	1	0	0	0	0
34 1245 2091 285 267 3412 1 1 1 0 1 1 1 1 35 187 7547 1042 563 7754 1 1 1 1 1 0 1 1 1 36 1723 3807 1461 867 5658 0 1 0 1	32	68	5262	4704	4027	5334	0	0	0	1	1	1	0	0
35 187 7547 1042 563 7754 1 1 1 1 1 0 1 1 36 1723 3807 1461 867 5658 0 1 0 1 0 1 1 0 1 1 0 1	33	380	4398	2297	2046	4805	1	1	1	1	1	1	1	1
36 1723 3807 1461 867 5658 0 1 0 1 1 1 1 1 1 37 161 4194 1284 883 4361 1 1 1 1 1 1 0 1 0 39 399 7127 1494 963 7540 1	34	1245	2091	285	267	3412	1	1	1	0	1	1	1	1
37 161 4194 1284 883 4361 1 1 1 1 1 0 1 0 39 399 7127 1494 963 7540 1	35	187	7547	1042	563	7754	1	1	1	1	1	0	1	1
39 399 7127 1494 963 7540 1 <th>36</th> <th>1723</th> <th>3807</th> <th>1461</th> <th>867</th> <th>5658</th> <th>0</th> <th>1</th> <th>0</th> <th>1</th> <th>1</th> <th>1</th> <th>1</th> <th>1</th>	36	1723	3807	1461	867	5658	0	1	0	1	1	1	1	1
42 1897 13433 824 542 15394 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	37	161	4194	1284	883	4361	1	1	1	1	1	0	1	0
47	39	399	7127	1494	963	7540	1	1	1	1	1	1	1	0
	42	1897	13433	824	542	15394	1	1	1	1	1	1	1	1
	47													
VU	08													

Appendix 10: SPSS outputs of coding data from online review eyetracking experiment

Frequencies

Statistics

STOP_T	O_READ	
N	Valid	28
	Missing	0

STOP_TO_READ

	0.00					
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1	26	92.9	92.9	92.9	
	2	2	7.1	7.1	100.0	
	Total	28	100.0	100.0		

Frequencies

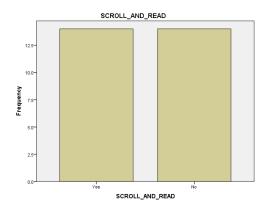
Statistics

SCROLL_AND_READ

N	Valid	28
	Missing	0

SCROLL_AND_READ

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	50.0	50.0	50.0
	2	14	50.0	50.0	100.0
	Total	28	100.0	100.0	



Frequencies

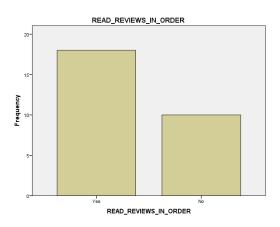
Statistics

READ_REVIEWS_IN_ORDER

	(E 11E110_111_011EE1	•
N	Valid	28
	Missing	0

READ_REVIEWS_IN_ORDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	18	64.3	64.3	64.3
	2	10	35.7	35.7	100.0
	Total	28	100.0	100.0	



Frequencies

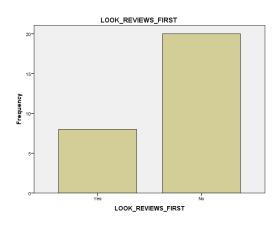
Statistics

LOOK_REVIEWS_FIRST

N	Valid	28
	Missing	0

LOOK_REVIEWS_FIRST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	28.6	28.6	28.6
	2	20	71.4	71.4	100.0
	Total	28	100.0	100.0	



Frequencies

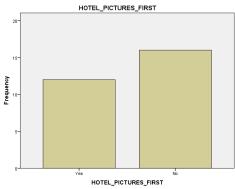
Statistics

HOTEL_PICTURES_FIRST

N	Valid	28
	Missing	0

HOTEL_PICTURES_FIRST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	12	42.9	42.9	42.9
	2	16	57.1	57.1	100.0
	Total	28	100.0	100.0	



Frequencies

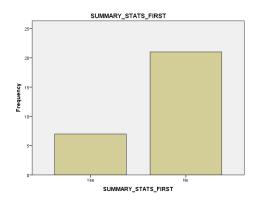
Statistics

SUMMARY_STATS_FIRST

N	Valid	28
	Missing	0

SUMMARY_STATS_FIRST

		Frequency Percent		Valid Percent	Cumulative Percent
ľ	Valid 1	7	25.0	25.0	25.0
	2	21	75.0	75.0	100.0
	Total	28	100.0	100.0	



Frequencies

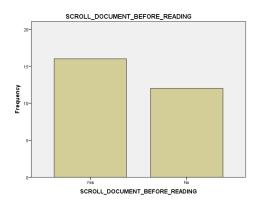
Statistics

SCROLL_DOCUMENT_BEFORE_READING

CONCE_BOOMENT_BET ONE_NEADING							
N	Valid	28					
	Missing	0					
Mean		1.43					
Median		1.00					
Mode		1					

SCROLL_DOCUMENT_BEFORE_READING

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	57.1	57.1	57.1
	2	12	42.9	42.9	100.0
	Total	28	100.0	100.0	



Frequencies

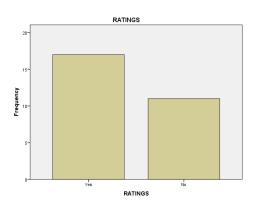
Statistics

RATINGS

N	Valid	28
	Missing	0
Mean		1.39
Median		1.00
Mode		1

RATINGS

	KATINOO											
	Frequency Percent		Valid Percent	Cumulative Percent								
Valid	1	17	60.7	60.7	60.7							
	2	11	39.3	39.3	100.0							
	Total	28	100.0	100.0								



Frequencies

Statistics

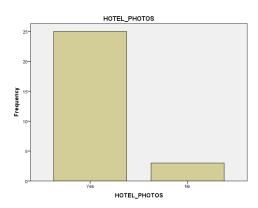
HOTEL_PHOTOS

HOTEL_PHOTOS								
N	Valid	28						
	Missing	0						

	Ī
Mean	1.11
Median	1.00
Mode	1

HOTEL_PHOTOS

		Frequency	Percent	Valid Percent	Cumulative Percent					
Valid	1	25	89.3	89.3	89.3					
	2	3	10.7	10.7	100.0					
	Total	28	100.0	100.0						



Frequencies

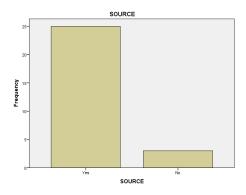
Statistics

SOURCE

N	Valid	28
	Missing	0
Mean		1.11
Median		1.00
Mode		1

SOURCE

		Frequency	uency Percent Valid		Cumulative Percent
Valid	1	25	89.3	89.3	89.3
	2	3	10.7	10.7	100.0
	Total	28	100.0	100.0	



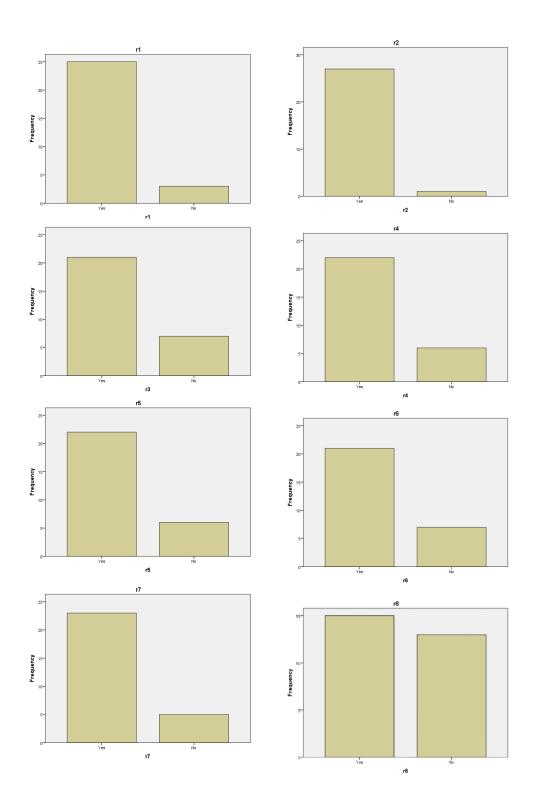
Frequencies

Statistics

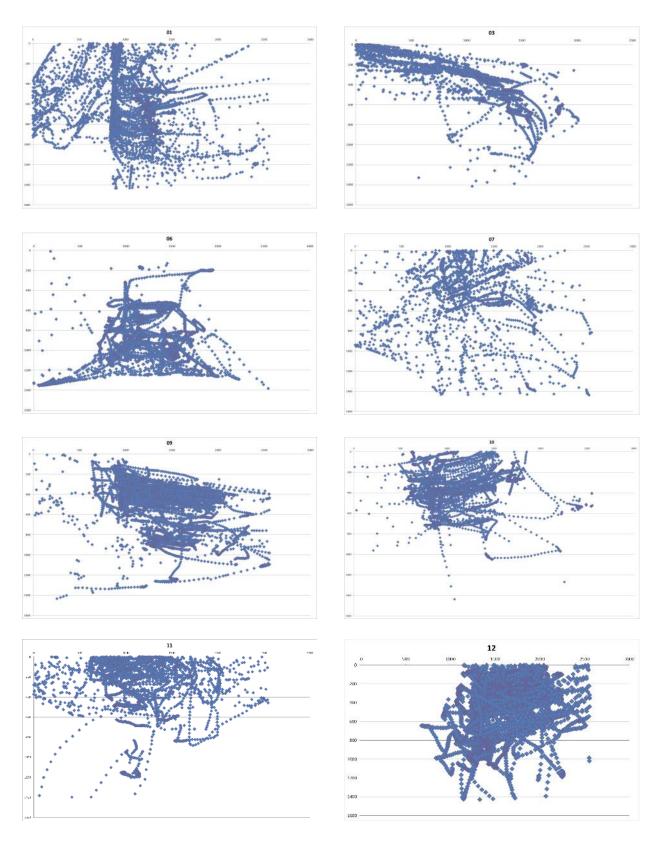
Otatistics									
		Source_Hits Review_Hits		Rating_Hits	Also_in_area_hits	General_Hits			
N	Valid	28	28	28	28	28			
	Missing	0	0	0	0	0			
Mean		964.00	7427.36	2142.39	1535.79	8436.25			
Media	n	558.50	6147.00	1373.50	852.50	7109.00			
Mode		26ª	1323ª	285ª	249 ^a	1662ª			
Std. Deviation		1019.913	5142.860	2088.169	1618.297	5865.653			
Minimum		26	1323	285	249	1662			
Maxim	ium	4500	21914	9310	7199	26565			

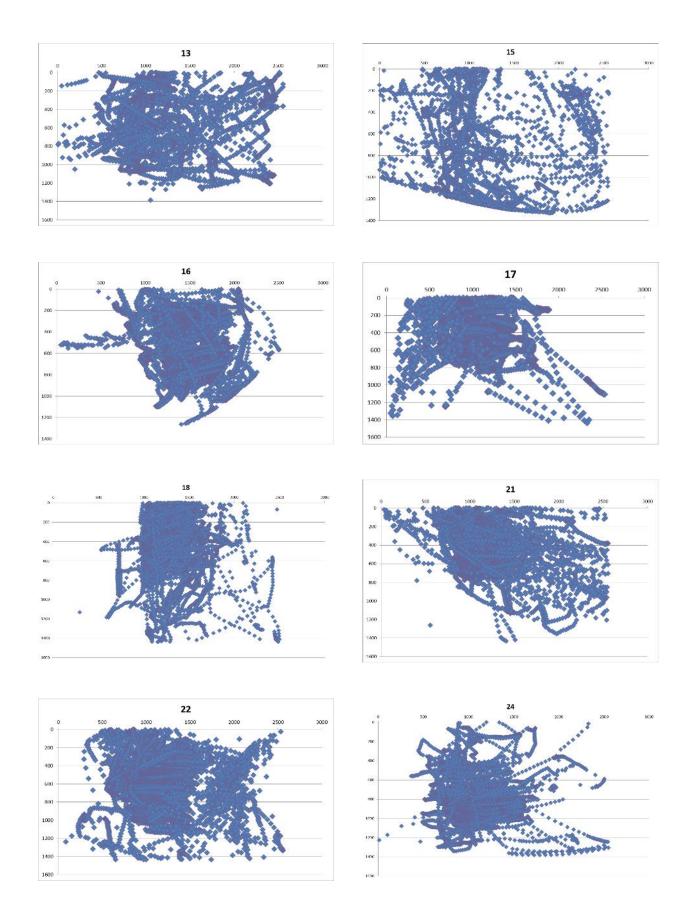
a. Multiple modes exist. The smallest value is shown

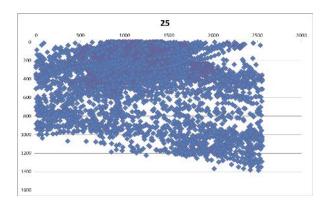
Bar Chart

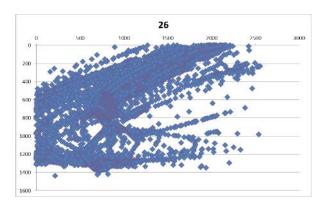


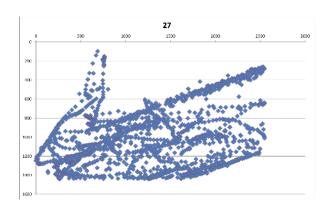
Appendix 11: Eye-tracking gaze plots of raw gaze data for each participant

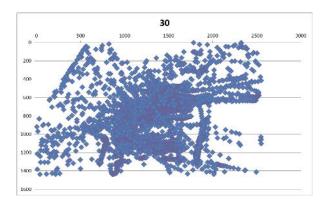


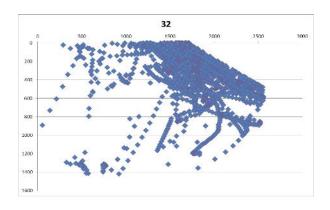


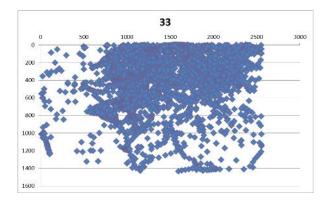


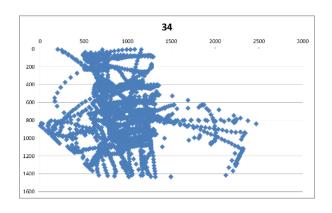


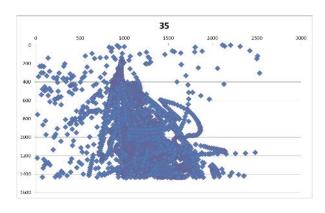


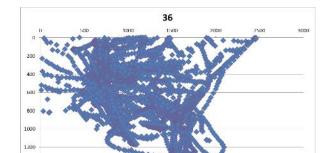


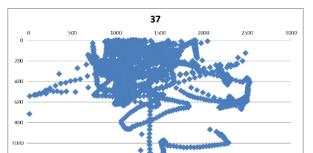












Appendix 12: Full questionnaire results

Q1	Q2_1	Q2_2	Q2_3	Q2_4	Q2_5	Q2_6	Q2_7	Q2_8	Q2_9	Q2_10	Q2_11	Q2_12	Q3_1	Q3_2
Please type in your unique code this will only be used to order the / participants differently from	Please tick ONE option for each statement that most closely / represents how strongly you agree or1. In uncertain times, I usually expect the best	Please tick ONE option for each statement that most closely / represents how strongly you agree or2. It's easy for me to relax	Please tick ONE option for each statement that most closely / represents how strongly you agree or3. If something can go wrong for me, it will	Please tick ONE option for each statement that most closely / represents how strongly you agree or4. I always look on the bright side of things	Please tick ONE option for each statement that most closely / represents how strongly you agree or5. I'm always optimistic about my future	Please tick ONE option for each statement that most closely / represents how strongly you agree or6. I enjoy my friends a lot	Please tick ONE option for each statement that most closely / represents how strongly you agree or7. It's important for me to keep busy	Please tick ONE option for each statement that most closely / represents how strongly you agree or8. I hardly ever expect things to go my way	Please tick ONE option for each statement that most closely / represents how strongly you agree or9. Things never work out the way I want them to	Please tick ONE option for each statement that most closely / represents how strongly you agree or10. I don't get upset too easily	Please tick ONE option for each statement that most closely / represents how strongly you agree or11. I'm a believer in the idea that "every cloud has a silver lining"	Please tick ONE option for each statement that most closely / represents how strongly you agree or12. I rarely count on good things happening to me	Please tick ONE option for how strongly you agree or disagree / with each of the following stateme1. I see myself as: Extroverted, enthusiastic	Please tick ONE option for how strongly you agree or disagree / with each of the following stateme2. I see myself as: Critical, quarrelsome
25	4	2	3	5	5	4	5	1	2	4	4	1	6	5
27	1	2	4	2	2	5	2	1	3	2	3	4	2	6
8	4	3	2	4	4	5	5	2	2	3	5	2	7	5
22	5	5	2	5	5	5	4	2	1	5	4	1	7	5
16	3	3	2	4	3	4	3	3	3	3	4	2	4	3
26 11	3	5	3	3	5	5	2	3	3	3	4 4	2	5	5
34	3	3	3	4	3	3	3	2	2	2	4	2	4	2
21	3	5	2	4	4	5	3	2	1	4	4	1	5	2
3	1	2	3	4	4	5	5	4	3	2	4	4	3	5
47	4	3	2	5	5	4	4	2	2	3	4	1	5	5
36	3	2	3	4	2	5	4	3	2	2	5	2	5	4
1	5	4	2	4	4	5	3	2	2	2	4	2	6	3
6	4	4	2	3	5	5	4	2	1	1	4	1	7	6
32	5	2	1	5	5	5	4	1	1	4	4	2	6	5
7	2	5	4	3	5	5	5	4	3	2	5	4	7	5
15	4	5	2	4	5	5	5	3	3	3	3	3	6	3
30	3	5	2	4	4	4	4	2	2	4	3	1	6	5
17	4	3	2	5	5	4	5	3	4	2	5	2	5	4
12	3	4	2	4	4	5	4	3	2	4	3	2	5	1
18	4	5	3	4	5	4	4	3	2	3	4	2	6	2
10	4	4	3	5	5	5	4	2	3	2	3	4	6	5
24	3	4	4	2	2	4	4	4	2	4	2	4	4	5
39	2	4	4	4	5	4	4	3	1	4	4	3	5	2
33	4	3	3	4	- 4	4	3	2	2	3	5	1	5	3
37	3	3	2	4	3	4	3	2	2	3	3	4	4	4
35	4	3	2	3	4	5	5	2	2	3	4	3	7	3
13	2	4	3	3	4	4	2	3	3	4	2	3	5	3
42	4	3	4	3	4	4	5	3	2	1	3	2	4	3
														-

Q1	Q3_3	Q3_4	Q3_5	Q3_6	Q3_7	Q3_8	Q3_9	Q3_10	Q4_1	Q4_2	Q4_3	Q4_4	Q4_5	Q4_6	Q4_7	Q4_8	Q5_1	Q5_2	Q5_3	Q5_4
Please type in your unique code this will only be used to order the / participan ts differently from	Please tick ONE option for how strongly you agree or disagree or disagree following stateme 3. I see myself as: Dependabl e, self- disciplined	Please tick ONE option for how strongly you agree or disagree / with each of the following stateme. 4. I see myself as: Amious, easily upset	Please tick ONE option for how strongly you agree or disagree / with each of the following stateme 5. I see myself as: Open to new experience s, complex	Please tick ONE option for how strongly you agree or disagree / with each of the following stateme6. I see myself as: Reserved , quiet	Please tick ONE option for how strongly you agree or disagree / with each of the following stateme 7. I see myself as: Sympatheti c, warm	Please tick ONE option for how strongly you agree or disagree / with each of the following stateme 8. I see myself as: Disorganize d, careless	Please tick ONE option for how strongly you agree or disagree / with each of the following stateme9. I see myself as: Calm, emotionall y stable	Please tick ONE option for how strongly you agree or disagree / with each of the following stateme 10. I see myself as: Convention al, uncreative	Please tick ONE option for each statemen t that most closely // represen ts how strongly you agree or1. Everythin Eyerythin someho w related to one another	Please tick ONE option for each statemen t that most closely // represent s how strongly you agree or2. Even a small change in any element of the universe can lead to significan t alteration s in other	Please tick ONE option for each statement that most closely / represents how strongly you agree or 3. When disagreeme nt exists among people, they should search for ways to compromise and embrace everyone's opinions	Please tick ONE option for each statemen t that most closely / represent s how strongly you agree or4. Choosing a middle ground in an agreeme nt should be avoided	Please tick ONE option for each statemen t that most closely / represen ts how strongly you agree or5. An individua I who is currently honest will stay honest in the future	Please tick ONE option for each statemen t that most closely / represen ts how strongly you agree or6. Current situation s can change at any time	Please tick ONE option for each statemen t that most closely / represen ts how strongly you agree or7. It is more importan t to pay attention to the whole context rather than the details	Please tick ONE option for each statement that most closely / represent s how strongly you agree or8. We should consider the situation a person is faced with, as well as his/her personalit y, in order to understan d ones behaviour	Please tick ONE option for each statement that most closely / represents how characterist ic each o 1. I form opinions about everything	Please tick ONE option for each statement that most closely / represents how characterist ic each o 2. I prefer to avoid taking extreme opinion	Please tick ONE option for each statement that most closely / represents how characterist ic each o 3. It is very important to me to hold strong opinions	Please tick ONE option for each statement that most closely / represents how characterist ic each o 4. I want to know exactly what is good and bad about everything
25	6	2	7	3	6	3	5	3	7	elements 6	4	5	2	6	3	6	3	4	3	2
27	4	5	5	4	4	2	2	4	2	2	4	4	2	5	4	6	5	2	5	5
8	6	4	7	2	6	1	4	1	4	4	5	5	4	6	4	7	4	3	4	5
22	5	1	7	3	6	1	7	2	7	4	6	3	2	7	7	7	4	4	4	5
16 26	5	2	7	1	4	2	5 7	3 2	6	5	5 7	4	3	6 7	4 7	6 7	4	4	3	2
26 11	6	3	5	4	4	3	5	4	5	5	6	4	2	7	5	6	4	3	3	4
34	5	5	5	5	6	1	3	2	6	6	7	2	2	7	3	7	5	4	2	4
21	5	2	6	3	6	4	5	4	4	5	6	4	2	6	4	6	4	4	4	2
3	5	5	5	2	7	5	2	2	5	6	6	3	2	7	5	6	4	2	5	3
47	7	3	6	5	6	3	5	5	6	6	6	5	6	6	6	6	4	4	2	2
36 1	5	7	6	3	6 5	1 2	4	1 3	7	7 5	7	3	4 5	7 5	6	7	3	3	3	4 3
6	6	2	7	5	5	2	3	1	7	7	2	7	5	6	6	7	5	1	4	5
32	5	2	7	2	7	4	3	1	6	6	3	1	5	7	7	7	5	1	5	5
7	1	6	6	5	6	5	5	1	5	5	4	5	3	6	3	5	5	4	4	5
15	6	1	6	1	5	2	6	1	4	4	5	6	6	6	5	5	4	3	3	3
30	5	1	7	3	5	3	5	1	6	5	6	3	5	5	4	6	4	2	4	4
17	3	3	7	3	7	5	4	1	7	7	7	3	4	7	5	7	4	4	3	4
12	6	2	5	4	5	1	6	4	4	5	6	2	3	7	5	6	1	4	2	3
18	6	2	7	2	6	1	6	2	3	3	6	1	5	7	5	6	5	2	4	4
10 24	7	3 5	6	5	7	2	5	4	5	5	6 7	5	6	7	5	5	4	3 4	3	5 4
39	3	4	4	4	5	4	3	2	6	6	4	3	3	6	2	6	4	2	4	5
	,	-	-	_	,		,					,	,				-	-		, ,

33	6	2	7	5	6	2	6	2	6	5	4	4	2	2	4	2	4	2	4	3
9	6	1	6	3	6	2	4	3	5	5	5	1	2	7	6	6	3	2	3	3
37	5	5	4	6	6	3	5	4	7	7	7	2	4	6	5	6	4	3	4	4
35	5	3	6	2	6	2	3	3	6	5	5	4	6	6	3	7	4	2	4	5
13	5	2	5	6	6	2	6	5	4	3	5	2	2	6	6	5	2	4	4	5
42	4	5	5	6	5	2	3	4	4	3	7	2	4	7	5	6	4	3	4	3

Q1	Q5_5	Q5_6	Q5_7	Q5_8	Q5_9	Q5_10	Q5_11	Q5_12	Q5_13	Q5_14	Q5_15	Q5_16	Q6_4	Q6_5	Q6_6	Q6_7	Q6_8	Q6_9	Q6_11	Q6_12
Please	Please tick	Please tick	Please tick	Please tick	Please tick	Please tick	Please tick	Please tick	Please tick	Please tick	Please tick	Please tick	What							
type in	ONE option	ONE option	ONE option	ONE option	ONE option	ONE option	ONE option	ONE option	ONE option	ONE option	ONE option	ONE option	was the							
your	for each statement	for each statement	for each statement	for each statement	for each statement	for each statement	for each statement	for each statement	for each statement	for each statement	for each statement	for each statement	most useful							
unique code this	that most	that most	that most	that most	that most	that most	that most	that most	that most	that most	that most	that most	review							
will only	closely /	closely /	closely /	closely /	closely /	closely /	closely /	closely /	closely /	closely /	closely /	closely /	from							
be used to	represents	represents	represents	represents	represents	represents	represents	represents	represents	represents	represents	represents	the eye							
order the /	how	how	how	how	how	how	how	how	how	how	how	how	tracking							
participant	characteristi	characteristi	characteristi	characteristi	characteristi	characteristi	characteristi	characteristi	characteristi	characteristi	characteristi	characteristi	exercise							
\$	c each o	c each o	c each o	c each o	c each o	c each o	c each o	c each o	c each o	c each o	c each o	c each o	? /	? /	? /	? /	? /	? /	? /	? /
differently from	5. I often prefer to	6. If something	7. I enjoy strongly	8. There are many things	9. It bothers me to	10. I like to have strong	11. I have many more	12. I would rather have	13. I pay a lot of	14. I only form strong	15. I like to decide that	16. I am pretty much	Please choose							
110111	remain	does not	liking and	for which I	remain	opinions	opinions	a strong	attention to	opinions	new things	indifferent	the ONE							
	neutral	affect me, I	disliking	do not have	neutral	even when I	than the	opinion	whether	when I have	are really	to many	you							
	about	do not	new things	а		am not	average	than no	things are	to	good or	important	most							
	complex	usually		preference		personally	person	opinion	good or bad		really bad	issues	l	IAlso	ITitle	l	I	l	l	l
	issues	determine if				involved		than no					Review	in the	and	Review	Review	Review	Review	Review
		it is good or had						opinion at					1	area	photos	2	3	4	5	6
25	4	2	1	3	2	1	4	2	2	4	2	2	2	2	2	3	2	2	2	1
27	3	1	5	3	3	5	4	4	5	4	4	2	1	2	2	2	2	2	1	3
8	3	4	3	4	4	4	3	5	4	5	3	4	3	2	2	2	2	2	2	2
22	2	2	4	2	2	4	4	5	4	5	4	4	2	2	2	3	2	2	3	2
16	2	3	2	2	3	2	3	3	4	4	2	3	2	2	2	2	2	2	2	1
26	2	4	2	4	2	4	4	4	5	4	2	1	2	2	2	2	3	2	2	1
11	4	2	2	4	2	3	2	2	4	4	3	3	2	2	2	2	2	3	2	1
34	5	4	4	4	2	2	2	3	3	4	4	2	2	2	2	3	2	2	2	2
21	2	4	2	3	2	2	2	3	2	2	2	2	2	2	2	2	1	2	3	2
3	3	2	4	4	4	5	4	5	3	2	4	3	2	2	2	2	2	2	3	2
47	4	2	2	4	2	2	2	2	4	4	2	2	2	2	3	2	2	2	2	2
36	2	1	3	5	2	2	3	3	4	4	4	3	1	2	2	2	2	2	2	3
1	4	3	4	3	2	2	4	3	4	2	2	2	2	2	3	2	2	2	1	2
6	1	4	2	2	4	4	2	4	5	2	4	1	2	2	2	2	2	2	2	3
32	1	2	5	2	1	2	4	3	4	2	4	1	2	2	2	3	2	2	2	1
7	2	2	5	2	4	4	4	3	5	2	4	2	2	2	3	2	2	2	1	2
15	4	5	4	3	2	3	5	2	4	4	3	3	1	2	2	2	2	2	2	2
30	2	2	4	4	4	2	2	4	4	2	2	2	3	2	2	2	2	1	2	2
17	2	2	2	2	3	3	4	2	2	4	3	4	2	2	2	2	2	2	3	2
12	4	4	3	4	2	1	1	3	3	4	2	4	2	2	2	2	2	2	2	1
18	2	2	3	2	4	4	4	4	4	2	2	1	2	2	2	2	1	2	3	2

10	2	2	4	3	2	3	2	3	4	5	5	4	2	2	2	3	2	2	2	2
24	2	2	4	3	3	4	4	4	5	2	5	3	2	2	3	2	2	2	2	2
39	5	4	2	4	2	4	4	5	3	2	4	3	2	3	2	2	2	2	3	2
33	2	1	4	3	2	4	3	5	3	2	3	2	2	2	2	2	2	1	2	3
9	4	4	1	3	2	1	1	2	2	2	2	1	2	1	3	2	2	2	2	2
37	3	4	4	4	3	3	3	4	4	3	4	3	2	2	2	2	2	2	3	1
35	1	2	4	1	2	4	4	5	4	3	4	2	2	2	2	3	1	2	2	2
13	4	4	2	4	2	2	2	3	3	4	4	2	2	2	2	2	2	3	2	1
42	4	4	4	3	4	5	3	3	4	5	4	4	2	2	2	2	2	2	2	2

Q1	Q6_13	Q6_14	Q7_1	Q7_2	Q7_3	Q7_4	Q7_5	Q7_6	Q7_7	Q7_8	Q7_9	Q7_10	Q8_1	Q8_2	Q8_3	Q8_4	Q8_5	Q8_6	Q8_7	Q8_8
Please type in your unique code this will only be used to order the / particip ants differen tty from	What was the most useful review from the eye tracki ng exerci se? / Please choos e the ONE you most I Revie w 7	What was the most useful review from the eye tracking exercise? / Please choose the ONE you most I	Please select ONE number option as to where on the scales you / agree to the following statement: Important:Unim portant	Please select ONE number option as to where on the scales you / agree to the following statement: Boring:Intere sting	Please select ONE number option as to where on the scales you / agree to the following statement Relevant.irrel evant	Please select ONE number option as to where on the scales you / agree to the following statement Exciting:Unex citing	Please select ONE number option as to where on the scales you / agree to the following statement:Means nothing:M eans a lot to me	Please select ONE number option as to where on the scales you / agree to the following statement Appealing:Unap pealing	Please select ONE number option as to where on the scales you / agree to the following statement: Fascinating:Mu ndane	Please select ONE number option as to where on the scales you / agree to the following statement Worthless:Val uable	Please select ONE number option as to where on the scales you / agree to the following statement: Involving:Uninv olving	Please select ONE number option as to where on the scales you / agree to the following statement: Not needed:Ne eded	Please tick ONE option for how strong! y you agree or read of the following statem e1. Most student s will tell the instruct or when adding up their score, even if the instruct or had given them more points than they deserve d.	Please tick ONE option for how strongly you agree or disagree / with each of the followin g stateme2. If you are person a job to do and leave him or her to do it, the person will finish it successfully	Please tick ONE option for how strong! y you agree or disagre e or disagree or di	Please tick ONE option for how strong! y you agree or disagre e or disagree or di	Please tick ONE option for how strongl y you agree or disagre e / / with each of the following statem e5. People usually tell the truth, even when they would be better off lying	Please tick ONE option for how strongl y you agree or disagre e / / with each of the following statem e6. Most student s do not cheat when taking an exam	Please tick ONE option for how strongl y you agree or disagre e / / with each of the following statem e7. If most people could get into a movie without traying and be sure they were not seen, they would do it	Please tick ONE option for how strongl y you agree or disagre e / with each of the following statem e8. Most people are not really honest for a desirabl e reason; they're afraid of getting caught

25	2	2	1	6	2	2	6	2	2	6	2	7	5	3	5	6	5	6	7	4
27	2	2	1	4	1	2	7	2	2	7	1	7	2	2	7	5	1	6	6	6
8	2	2	1	6	1	2	7	2	3	7	2	7	7	4	6	5	4	6	4	7
22	2	2	1	2	2	5	6	4	5	6	3	6	1	4	6	6	4	7	6	5
16	2	3	1	7	1	3	7	3	3	6	3	7	3	3	5	3	2	3	7	5
26	2	2	1	5	5	4	6	4	3	5	5	5	5	5	7	2	3	7	3	6
11	2	2	1	7	1	2	6	2	2	7	3	7	2	3	5	6	6	7	3	4
34	2	1	2	4	1	4	5	3	3	5	4	6	1	3	5	5	2	6	6	4
21	2	2	1	4	1	2	6	3	3	6	2	7	2	6	5	4	3	6	6	5
3	2	2	1	3	6	2	1	5	5	1	5	1	3	1	6	5	3	6	7	5
47	2	2	1	6	1	2	7	2	3	7	2	7	3	5	3	3	5	5	3	3
36	2	2	1	5	1	4	7	3	3	6	3	7	4	5	4	2	4	6	4	3
1	2	2	2	5	2	3	5	2	3	6	3	6	5	6	3	5	4	5	5	5
6	2	1	3	1	3	7	5	7	7	5	7	7	2	2	6	7	4	6	7	6
32	2	2	6	2	6	6	4	6	7	4	7	2	2	6	5	1	4	7	5	3
7	2	2	3	5	3	4	3	3	5	5	6	4	2	6	5	6	2	7	7	5
15	3	2	4	3	6	4	5	3	4	5	4	5	4	5	5	4	6	6	5	4
30	2	2	2	5	2	3	5	2	2	6	3	6	3	5	5	3	3	6	6	5
17	2	1	1	6	1	3	6	4	3	6	2	6	2	4	5	4	2	6	6	5
12	3	2	1	6	2	2	5	2	1	6	3	6	3	6	5	3	3	6	4	2
18	2	2	1	6	1	3	6	1	3	7	2	6	6	6	5	6	6	7	3	4
10	2	2	1	6	1	2	4	4	4	6	4	6	6	5	5	7	4	4	5	6
24	1	2	1	7	1	2	7	1	1	7	1	7	3	6	6	3	5	6	5	6
39	2	2	7	5	6	5	,	7	7	7	5	7	3	3	5	4	4	7	2	6
33	2	2	1	6	2	3	6	2	2	6	2	6	2	5	3	2	2	2	5	2
9		2	1	5	2	4	6	2	4	7		6	2	4	3	3	3	5	3	3
37	2	2	2	6 5	6 2	6	6	2	3	6	2	6	2	5	5	4	3	6	3	5
35 13	2	2	2	5	2	4	5	2	4	6	3	5	5	3	6	5	5 3	4	3	5
42	2	3	1	7	1	3	2	4	3	6	3	6	2	3	6	5	3	4	3	5
42	- 2	3	1	,	1	3	2	4	3	3	3	0	2	3	3	3	4	3	,	3

Q1 Q8_9 Q8_10 Q8_11 Q8_12 Q8_13 Q8_14 Q9_1_TEXT Q9_2_TEXT Q9_3_TEX Q10_1 Q10_2 Q10_3 Q10_4 Q10_5 Q10_6 Q10_7 Q10_8 Q11 Q12 Q13 Q14 Q16																								
	Q1	l	Q8_9	Q8_10	Q8_11	Q8_12	Q8_13	Q8_14	Q9_1_TEXT	Q9_2_TEXT	Q9_3_TEX	Q10_1	Q10_2	Q10_3	Q10_4	Q10_5	Q10_6	Q10_7	Q10_8	Q11	Q12	Q13	Q14	Q16

Please type in your unique code this will only be used to order the / participan ts differentl y from	Please tick ONE option for how strongly you agree or disagree / with each of the followin g stateme9 Most people are basically honest	Please tick ONE option for how strongly you agree or disagree / with each of the followin g stateme10. Most people would tell a lile if they could gain by it	Please tick ONE option for how strongly you agree or disagree / with each of the following stateme11. If you act in good fath with people, almost all of them will reciproca te with fairness towards you	Please tick ONE option for how strongly you agree or disagree followin g stateme12. Model lead clean, decent lives	Please tick ONE option for how strongly you agree or disagree / with each of the followin g stateme13. Most people would cheat on their income tax if they had a chance	Please tick ONE option for how strongly you agree or disagree / with each of the followin g stateme14. Nowada ys people commit a lot of crimes and sins that no one else ever hears about	When reading online reviews, what things influence your decision / about the product or service beiFirst	When reading online reviews, what things influence your decision / about the product or service bel	When reading online reviews, what things influence your decision / about the product or service bei	When reading online reviews, how importa nt are the followin g / factors (please select ONE option fThe rating	When reading online reviews, how importa nt are the followin g / factors (please select ONE option fThe review is consiste nt with other reviews	When reading online reviews, how importa ant are the followin g / factors (please select ONE option fThe review is consiste nt within itself	When reading online reviews, how important are the following / factors (please select ONE option f Experienc es	When reading online online reviews, how important are the followin g / factors (please select ONE option f Length	When reading online reviews, how importa ant are the followin g / factors (please select ONE option f Reviewe r expertis e	When reading online reviews, how important are the following of following select ONE option f Argument density (more argument s to back up opinions or evaluations)	When reading online reviews, how importa nt are the followin g / factors (please select ONE option f Argume nt diversity (diversit y positive and negative argumen ts in the review)	Gende r:	Your curre nt age:	What is your highest educati on level?	Do / you read online reviews when making a decision to purchase a / product or service? (ti ck one)	Thank you for your time you have now reached the end of the / survey. / / Please see the superviso
25	6	5	5	5	5	5	the starts/rank	pictures	examples or stories	6	3	3	7	6	3	4	5	2	26	3	1	1
27	4	5	3	3	6	6	Room	cleanliness	location	7	7	4	6	2	2	3	2	2	21	3	1	1
8	5	1	3	3	4	7	Review	quality	price	7	7	7	7	4	5	7	7	1	19	1	1	1
22	4	6	6	6	2	4	Overall Rating	Bad Reviews	Good Reviews	7	3	7	6	1	6	5	5	1	19	3	1	1
16	5	6	4	3	4	5		Comments	Images	7	7	5	6	4	5	7	7	2	22	1	1	1
26 11	5 6	3	6 5	6 5	3	5 2	Experience Photos	Staff kindness Positive feedback	Expense Negative feedback	7	7 6	7 6	7 6	5 3	7	6 4	6	2	20 23	3	1	1
34	5	6	2	2	6	5	Good review	Pictures	Amount of bad reviews to good reviews	6	4	4	7	7	5	3	7	2	19	1	1	1
21	5	5	5	4	4	6	Rating (eg 4 out of 5 stars)	How many good reviews vs bad	What the bad reviews are about and whether it could be the same for me.	7	6	5	6	4	3	6	6	2	19	3	1	1
3	3	6	5	1	3	5	Negative reviews	Highlights Of Stay	Cheap prices	7	5	5	7	2	4	5	3	2	19	1	2	1
47	5	3	4	5	3	3	credabilty	relaibility	detail	7	4	6	6	5	7	6	6	1	33	3	1	1
36	3	3	6	4	3	4	Standard of service	Honesty, delivering on their promise	relevant and preferred informatio n	6	6	6	6	4	6	6	4	2	24	1	2	1
1	6	5	5	5	5	4	Customer Service	Comfort	Cleanlines	6	5	6	6	4	5	3	4	1	20	1	1	1
6	5	5	6	5	4	6	Emotion	Examples/Stor ies	Authority (eg top reviewer or not)	6	1	7	7	3	7	6	2	1	20	1	2	1

32	5	4	7	6	6	3	Checking if website seems true	Facts	Staff	5	5	7	5	3	5	6	7	1	26	3	2	1
7	5	5	7	6	5	5	Star rating	General good vibe	Statistics	7	3	3	7	7	2	2	1	1	18	1	2	1
15	6	4	6	6	3	5	Ambience/Lo ok	Qaulity	User friendlines s	2	6	6	5	3	6	5	5	1	18	3	1	1
30	5	5	6	6	2	3	Enjoyment	Value	Service	6	5	7	6	5	4	4	5	1	25	3	1	1
17	4	5	5	3	5	4	Relevant points	Pictures	Review history	4	5	6	5	4	5	7	7	1	23	1	1	1
12	6	5	6	7	2	3	Quality	Price	Honesty	6	5	6	6	4	3	3	4	2	31	3	1	1
18	6	3	6	6	3	5	Performance	Value for money	Customer service/aft er sales service	6	2	7	6	3	4	7	5	2	19	1	1	1
10	7	6	4	4	6	5	positive feedback	rating	people experienc e	7	4	5	7	2	6	5	6	1	25	3	1	1
24	3	4	2	3	4	5	Rating	Images	Comments	7	6	6	7	4	7	6	5	2	20	1	1	1
39	6	5	5	5	4	5	bad rating	reasons that the review rates low	photos of the hotel	6	5	7	6	4	7	7	7	2	25	4	1	1
33	6	5	5	4	4	2	Quality of Product	Quality of Staff	experienc e	5	6	2	6	3	1	5	6	2	29	4	2	1
9	6	2	5	5	2	4	rating	feedback	accessabili ty	6	6	6	6	4	4	7	7	2	44	4	1	1
37	4	5	4	4	4	4	date	time of a year	person	7	5	6	6	3	1	6	7	2	24	4	1	1
35	5	4	6	6	2	2	Comment	Number of reviews	Date	7	6	6	5	4	5	6	4	2	24	3	1	1
13	4	5	5	6	3	4	Rating	Negative experience	number of reviews	6	4	4	6	1	3	4	6	1	26	1	1	1
42	5	6	3	2	4	6	overall ranking/ratin g	the cost of the product or service	time/ date of the review	7	6	7	5	4	4	6	6	2	23	3	1	1

Appendix 13: Logistic Regression of Individual Review Gazes and Coded Reading Behaviours

Nominal Regression

Case Processing Summary

		N	Marginal Percentage
readreviewsinorder_01	,00	10	35,7%
	1,00	18	64,3%
Valid		28	100,0%
Missing		0	
Total		28	
Subpopulation		28ª	

a. The dependent variable has only one value observed in 28 (100.0%) subpopulations.

Step Summary

				otop ouiiii					
				Mo	odel Fitting (Criteria	Effect	Selection Te	ests
						-2 Log	Chi-		
Model		Action	Effect(s)	AIC	BIC	Likelihood	Square ^{a,b}	df	Sig.
Step 0	0	Entered	Intercept	38,498	39,831	36,498			
Step 1	1	Entered	REVIEW_FACTORS_4	34,672	37,337	30,672	5,826	1	,016

Stepwise Method: Forward Stepwise

- a. The chi-square for entry is based on the likelihood ratio test.
- b. The chi-square for removal is based on the likelihood ratio test.

Model Fitting Information

		Model Fitting Cr	iteria	Li	kelihood Ratio Tes	ets
Model	AIC	BIC	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	38,498	39,831	36,498			
Final	34,672	37,337	30,672	5,826	1	,016

Pseudo R-Square

	salas II salaalis
Cox and Snell	,188
Nagelkerke	,258
McFadden	,160

Likelihood Ratio Tests

		Model Fitting Criteria	Likelihood Ratio Tests			
	AIC of Reduced	BIC of Reduced -2 Log Likelihood of		Chi-		
Effect	Model	Model	Reduced Model	Square	df	Sig.
Intercept	39,210	40,542	37,210	6,537	1	,011
REVIEW_FACTORS_ 4	38,498	39,831	36,498	5,826	1	,016

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

	Parameter Estimates										
								95% Co			
readre	eviewsinorder_01ª	В	Std. Error	Wald	df	Sig.	Exp(B)	Lower	Upper Bound		
,00	Intercept	-10,696	4,825	4,914	1	,027	Exp(B)	Dodila	Boaria		
,	REVIEW_FACTORS_	. 5,000	1,020	,,,,,,		,021		ı	ı		
	4	1,629	,765	4,531	1	,033	5,100	1,138	22,863		

a. The reference category is: 1.00.

Classification

		Predicted						
Observed	,00	1,00	Percent Correct					
,00	5	5	50,0%					
1,00	3	15	83,3%					
Overall Percentage	28,6%	71,4%	71,4%					

Nominal Regression

Case Processing Summary

F		, , , , , , , , , , , , , , , , , , ,	
		N	Marginal Percentage
readreviewsinorder_01	,00	10	35,7%
	1,00	18	64,3%
Valid		28	100,0%
Missing		0	
Total		28	
Subpopulation		28ª	

a. The dependent variable has only one value observed in 28 (100.0%) subpopulations.

Step Summar

				otop ounn	··•·· ,				
				Model Fitting Criteria			Effect Selection Tests		
						-2 Log	Chi-		
Model		Action	Effect(s)	AIC	BIC	Likelihood	Square ^{a,b}	df	Sig.
Step 0	0	Entered	Intercept	38,498	39,831	36,498			
Step 1	1	Entered	REVIEW_FACTORS_4	34,672	37,337	30,672	5,826	1	,016

Stepwise Method: Forward Stepwise

- a. The chi-square for entry is based on the likelihood ratio test.
- b. The chi-square for removal is based on the likelihood ratio test.

Model Fitting Information

Model	Model Fitting Criteria	Likelihood Ratio Tests

	AIC	BIC	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	38,498	39,831	36,498			
Final	34,672	37,337	30,672	5,826	1	,016

Pseudo R-Square

- 1		
	Cox and Snell	,188
	Nagelkerke	,258
	McFadden	,160

Likelihood Ratio Tests

		Model Fitting Criteria	Likelihood Ratio Tests			
	AIC of Reduced	BIC of Reduced -2 Log Likelihood of		Chi-		
Effect	Model	Model	Reduced Model	Square	df	Sig.
Intercept	39,210	40,542	37,210	6,537	1	,011
REVIEW_FACTORS_ 4	38,498	39,831	36,498	5,826	1	,016

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Parameter Estimates

	i diameter Estimates								
								95% Co	
								Lower	Upper
readre	eviewsinorder_01a	В	Std. Error	Wald	df	Sig.	Exp(B)	Bound	Bound
,00	Intercept	-10,696	4,825	4,914	1	,027			
	REVIEW_FACTORS_ 4	1,629	,765	4,531	1	,033	5,100	1,138	22,863

a. The reference category is: 1.00.

Classification

	Predicted						
Observed	,00	1,00	Percent Correct				
,00	5	5	50,0%				
1,00	3	15	83,3%				
Overall Percentage	28,6%	71,4%	71,4%				

Nominal Regression

Case Processing Summary

Case 1 locessing duninary									
		N	Marginal Percentage						
readreviewsinorder_01	,00	10	35,7%						
	1,00	18	64,3%						
Valid		28	100,0%						
Missing		0							

Total	28	
Subpopulation	28 ^a	

a. The dependent variable has only one value observed in 28 (100.0%) subpopulations.

Step Summary

				Мо	odel Fitting (Criteria	Effect Selection Tests			
						-2 Log	Chi-			
Model		Action	Effect(s)	AIC	BIC	Likelihood	Square ^{a,b}	df	Sig.	
Step 0	0	Entered	Intercept	38,498	39,831	36,498	-			
Step 1	1	Entered	REVIEW_FACTORS_4	34,672	37,337	30,672	5,826	1	,016	

Stepwise Method: Forward Stepwise

- a. The chi-square for entry is based on the likelihood ratio test.
- b. The chi-square for removal is based on the likelihood ratio test.

Model Fitting Information

		Model Fitting Cr	iteria	Likelihood Ratio Tests				
Model	AIC BIC -2 L		-2 Log Likelihood	Chi-Square	df	Sig.		
Intercept Only	38,498	39,831	36,498					
Final	34,672	37,337	30,672	5,826	1	,016		

Pseudo R-Square

Cox and Snell	,188
Nagelkerke	,258
McFadden	,160

Likelihood Ratio Tests

		Model Fitting Criteria	Likelihood Ratio Tests			
	AIC of Reduced	BIC of Reduced	-2 Log Likelihood of	Chi-		
Effect	Model	Model	Reduced Model	Square	df	Sig.
Intercept	39,210	40,542	37,210	6,537	1	,011
REVIEW_FACTORS_ 4	38,498	39,831	36,498	5,826	1	,016

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

	Parameter Estimates										
								95% Co			
readreviewsinorder_01a		В	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound		
,00	Intercept	-10,696	4,825	4,914	1	,027					
	REVIEW_FACTORS_ 4	1,629	,765	4,531	1	,033	5,100	1,138	22,863		

a. The reference category is: 1.00.

Classification

Observed	Predicted

	,00	1,00	Percent Correct
,00	5	5	50,0%
1,00	3	15	83,3%
Overall Percentage	28,6%	71,4%	71,4%

Appendix 14: Correlation Check of Personal Characteristics/Traits

					Con	relations					· · · · · · · · · · · · · · · · · · ·
									Conscientioo		
			THINK_mea	NES_mean_	INVOLVE_m	DTRUST_m	Extraversion	Agreeablene	usness_mea	Emotionalsta	Openness_
		LOT_mean	n	computed	ean	ean	_mean	ss_mean	n	bility_mean	mean
LOT_mean	Pearson										
	Correlati	1	.069	026	231	.513**	.593**	.286	.253	.657*	.542"
	on										
	Sig. (2-										
	tailed)		.725	.897	.236	.005	.001	.139	.194	.000	.003
	N	28	28	28	28	28	28	28	28	28	28
THINK_mea	Pearson										
n	Correlati	.069	1	263	063	.064	136	.220	.045	043	.022
	on		·							·	
	Sig. (2-	.725		.177	.751	.746	.490	.261	.822	.829	.912
	tailed)										
	Ν	28	28	28	28	28	28	28	28	28	28
NES_mean_	Pearson										
computed	Correlati	026	263	1	382*	034	.214	313	266	300	.348
	on										
	Sig. (2-	.897	.177		.045	.862	.273	.105	.172	.121	.070
	tailed)										
	N	28	28	28	28	28	28	28	28	28	28
INVOLVE_	Pearson										
mean	Correlati	231	063	382*	1	.024	103	.036	.253	.100	304
	on		·							·	
	Sig. (2- tailed)	.236	.751	.045		.903	.604	.857	.195	.614	.115
	N	28	28	28	28	28	28	28	28	28	28
DTRUST_m		20	20	20	20	20	20	20	20	20	20
ean	Correlati	.513**	.064	034	.024	1	.522**	.335	.266	.455	.205
	on										
	Sig. (2-										
	tailed)	.005	.746	.862	.903		.004	.081	.171	.015	.295
	N	28	28	28	28	28	28	28	28	28	28

I	ı	Ī	Ī				Ì				
Extraversion	Pearson										
_mean	Correlati	.593**	136	.214	103	.522**	1	.029	.036	.360	.667**
	on										
	Sig. (2-										
		.001	.490	.273	.604	.004		.882	.854	.060	.000
	tailed)										
	N	28	28	28	28	28	28	28	28	28	28
Agreeablen	Pearson										
ess_mean	Correlati	.286	.220	313	.036	.335	.029	1	.225	.285	019
	on										
	Sig. (2-										
	tailed)	.139	.261	.105	.857	.081	.882		.251	.141	.924
	N	28	28	28	28	28	28	28	28	28	28
Conscientio	Pearson										
ousness_me	Correlati	.253	.045	266	.253	.266	.036	.225	1	.468	083
an	on										
	Sig. (2-										
	tailed)	.194	.822	.172	.195	.171	.854	.251		.012	.676
	N	28	28	28	28	28	28	28	28	28	28
Emotionalst	Pearson										
ability_mean	Correlati	.657*	043	300	.100	.455°	.360	.285	.468*	1	.214
	on										
	Sig. (2-	.000	.829	.121	.614	.015	.060	.141	.012		.275
	tailed)		.020		.011	.010	.000		.012		.270
	N	28	28	28	28	28	28	28	28	28	28
Openness_	Pearson										
mean	Correlati	.542**	.022	.348	304	.205	.667	019	083	.214	1
	on										
	Sig. (2-	.003	.912	.070	.115	.295	.000	.924	.676	.275	
	tailed)										
	N	28	28	28	28	28	28	28	28	28	28

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

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

Appendix 15: Life Orientation Test (LOT) Analyses

Statistics

LOI	meanscor	e

LO I_IIIO		
N	Valid	28
	Missing	0
Mean		3.6905
Median		3.8333
Mode		3.83
Minimur	n	2.58
Maximu	m	4.67

LOT_meanscore

	LO I_IIIeaniscore				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.58	1	3.6	3.6	3.6
	2.92	1	3.6	3.6	7.1
	3.08	2	7.1	7.1	14.3
	3.33	2	7.1	7.1	21.4
	3.42	4	14.3	14.3	35.7
	3.58	1	3.6	3.6	39.3
	3.67	2	7.1	7.1	46.4
	3.83	5	17.9	17.9	64.3
	3.92	3	10.7	10.7	75.0
	4.00	2	7.1	7.1	82.1
	4.08	1	3.6	3.6	85.7
	4.17	2	7.1	7.1	92.9
	4.42	1	3.6	3.6	96.4
	4.67	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

LOT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	31.00	1	3.6	3.6	3.6
	35.00	1	3.6	3.6	7.1
	36.00	2	7.1	7.1	14.3
	37.00	4	14.3	14.3	28.6
	38.00	4	14.3	14.3	42.9
	39.00	3	10.7	10.7	53.6

	i	İ	1	
40.00	3	10.7	10.7	64.3
41.00	2	7.1	7.1	71.4
42.00	1	3.6	3.6	75.0
43.00	1	3.6	3.6	78.6
44.00	4	14.3	14.3	92.9
45.00	1	3.6	3.6	96.4
47.00	1	3.6	3.6	100.0
Total	28	100.0	100.0	

LOT_mean (Binned)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	13	46.4	46.4	46.4
	2	15	53.6	53.6	100.0
	Total	28	100.0	100.0	

Reliability Statistics

Cronbach's Alpha	N of Items
.785	8

Appendix 16: Analysis-Holism Scale Analyses

Statistics

	Causality_meanscore	Contradictions_meanscore	Change_meanscore	Attention_meanscore	THINK_meanscore
N Valid	28	28	28	28	28
Missing	0	0	0	0	0
Mean	5.2679	5.1607	5.4107	5.3036	5.2857
Median	5.5000	5.2500	5.5000	5.2500	5.1250
Mode	5.50	5.00	5.50	5.00	5.00 ^a
Minimum	2.00	1.50	4.00	3.00	4.13
Maximum	7.00	7.00	6.50	7.00	6.63

a. Multiple modes exist. The smallest value is shown

Frequency Table

Causality_meanscore

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	3.6	3.6	3.6
	3.00	1	3.6	3.6	7.1
	3.50	2	7.1	7.1	14.3
	4.00	1	3.6	3.6	17.9
	4.50	2	7.1	7.1	25.0
	5.00	5	17.9	17.9	42.9
	5.50	7	25.0	25.0	67.9
	6.00	3	10.7	10.7	78.6
	6.50	2	7.1	7.1	85.7
	7.00	4	14.3	14.3	100.0
	Total	28	100.0	100.0	

Contradictions_meanscore

		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1.50	1	3.6	3.6	3.6	
	3.50	3	10.7	10.7	14.3	
	4.00	2	7.1	7.1	21.4	
	4.50	3	10.7	10.7	32.1	
	5.00	5	17.9	17.9	50.0	
	5.50	4	14.3	14.3	64.3	

1		i	j		I
	6.00	4	14.3	14.3	78.6
	6.50	4	14.3	14.3	92.9
	7.00	2	7.1	7.1	100.0
	Total	28	100.0	100.0	

Change_meanscore

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.00	5	17.9	17.9	17.9
	4.50	2	7.1	7.1	25.0
	5.00	3	10.7	10.7	35.7
	5.50	7	25.0	25.0	60.7
	6.00	5	17.9	17.9	78.6
	6.50	6	21.4	21.4	100.0
	Total	28	100.0	100.0	

Attention_meanscore

	Attention_meanscore				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	1	3.6	3.6	3.6
	4.00	3	10.7	10.7	14.3
	4.50	2	7.1	7.1	21.4
	5.00	8	28.6	28.6	50.0
	5.50	7	25.0	25.0	75.0
	6.00	2	7.1	7.1	82.1
	6.50	2	7.1	7.1	89.3
	7.00	3	10.7	10.7	100.0
	Total	28	100.0	100.0	

THINK_meanscore

			TTIII VI C_III GGII GGV		
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.13	3	10.7	10.7	10.7
	4.50	2	7.1	7.1	17.9
	4.75	1	3.6	3.6	21.4
	4.88	1	3.6	3.6	25.0
	5.00	4	14.3	14.3	39.3
	5.13	4	14.3	14.3	53.6
	5.25	1	3.6	3.6	57.1
	5.50	3	10.7	10.7	67.9
	5.75	2	7.1	7.1	75.0

				-
5.88	1	3.6	3.6	78.6
6.00	2	7.1	7.1	85.7
6.13	2	7.1	7.1	92.9
6.50	1	3.6	3.6	96.4
6.63	1	3.6	3.6	100.0
Total	28	100.0	100.0	

THINK

			HIMIX		
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	29.00	2	7.1	7.1	7.1
	33.00	1	3.6	3.6	10.7
	36.00	4	14.3	14.3	25.0
	37.00	2	7.1	7.1	32.1
	38.00	2	7.1	7.1	39.3
	39.00	2	7.1	7.1	46.4
	40.00	5	17.9	17.9	64.3
	41.00	1	3.6	3.6	67.9
	42.00	3	10.7	10.7	78.6
	43.00	1	3.6	3.6	82.1
	44.00	1	3.6	3.6	85.7
	45.00	1	3.6	3.6	89.3
	46.00	1	3.6	3.6	92.9
	47.00	2	7.1	7.1	100.0
	Total	28	100.0	100.0	

THINK_mean (Binned)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	53.6	53.6	53.6
	2	13	46.4	46.4	100.0
	Total	28	100.0	100.0	

Reliability Statistics

Cronbach's Alpha	N of Items
.612	8

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Appendix 17: Need to Evaluate Scale Analyses

Statistics

NES_meanscore

N	Valid	28
	Missing	0
Mean		3.3304
Median	1	3.3125
Mode		2.88
Minimu	ım	2.19
Maxim	um	4.31

NES_meanscore

			NES_meansc	016	
					Cumulative
	_	Frequency	Percent	Valid Percent	Percent
Valid	2.19	1	3.6	3.6	3.6
	2.56	1	3.6	3.6	7.1
	2.63	1	3.6	3.6	10.7
	2.81	1	3.6	3.6	14.3
	2.88	3	10.7	10.7	25.0
	2.94	1	3.6	3.6	28.6
	3.00	1	3.6	3.6	32.1
	3.06	2	7.1	7.1	39.3
	3.19	2	7.1	7.1	46.4
	3.31	2	7.1	7.1	53.6
	3.38	2	7.1	7.1	60.7
	3.44	1	3.6	3.6	64.3
	3.69	2	7.1	7.1	71.4
	3.75	1	3.6	3.6	75.0
	3.81	2	7.1	7.1	82.1
	3.88	1	3.6	3.6	85.7
	3.94	1	3.6	3.6	89.3
	4.13	1	3.6	3.6	92.9
	4.19	1	3.6	3.6	96.4
	4.31	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	15	53.6	53.6	53.6
	2	13	46.4	46.4	100.0
	Total	28	100.0	100.0	

Reliability Statistics

Í	
Cronbach's Alpha	N of Items
.811	16

Appendix 18: Ten-Item Personality Inventory Analyses

Statistics

Personality_meanscore

	7=	
N	Valid	28
	Missing	0
Mean		5.0750
Median		5.2000
Mode		5.20 ^a
Minimur	n	3.60
Maximu	m	6.20

a. Multiple modes exist. The smallest value

is shown

-	Personality_meanscore					
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	3.60	1	3.6	3.6	3.6	
	4.10	1	3.6	3.6	7.1	
	4.20	2	7.1	7.1	14.3	
	4.30	2	7.1	7.1	21.4	
	4.40	1	3.6	3.6	25.0	
	4.60	1	3.6	3.6	28.6	
	4.80	1	3.6	3.6	32.1	
	4.90	1	3.6	3.6	35.7	
	5.00	2	7.1	7.1	42.9	
	5.20	4	14.3	14.3	57.1	
	5.40	4	14.3	14.3	71.4	
	5.50	3	10.7	10.7	82.1	
	5.70	1	3.6	3.6	85.7	
	5.80	1	3.6	3.6	89.3	
	6.00	1	3.6	3.6	92.9	
	6.10	1	3.6	3.6	96.4	
	6.20	1	3.6	3.6	100.0	
	Total	28	100.0	100.0		

Statistics

	Extraversion_means	Agreeableness_mean	Conscientiousness_mean	EmotionalStability_mean	Openness_means
	core	score	score	score	core
N Valid	28	28	28	28	28
Missi ng	0	0	0	0	0
Mean	4.8214	4.9286	5.2143	4.7321	5.6786
Median	5.0000	5.0000	5.5000	5.0000	5.5000
Mode	5.00	5.00	6.00	6.00	5.50 ^a
Minimum	3.00	3.00	2.00	2.50	4.00
Maximu m	6.50	6.00	6.50	7.00	7.00

a. Multiple modes exist. The smallest value is shown

Frequency Table

Extraversion_meanscore

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	3	10.7	10.7	10.7
	3.50	2	7.1	7.1	17.9
	4.00	1	3.6	3.6	21.4
	4.50	6	21.4	21.4	42.9
	5.00	7	25.0	25.0	67.9
	5.50	4	14.3	14.3	82.1
	6.00	3	10.7	10.7	92.9
	6.50	2	7.1	7.1	100.0
	Total	28	100.0	100.0	

Agreeableness_meanscore

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	1	3.6	3.6	3.6
	3.50	2	7.1	7.1	10.7
	4.00	2	7.1	7.1	17.9
	4.50	5	17.9	17.9	35.7
	5.00	8	28.6	28.6	64.3
	5.50	5	17.9	17.9	82.1
	6.00	5	17.9	17.9	100.0
	Total	28	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	3.6	3.6	3.6
	3.00	1	3.6	3.6	7.1
	3.50	1	3.6	3.6	10.7
	4.00	2	7.1	7.1	17.9
	4.50	2	7.1	7.1	25.0
	5.00	4	14.3	14.3	39.3
	5.50	6	21.4	21.4	60.7
	6.00	8	28.6	28.6	89.3
	6.50	3	10.7	10.7	100.0
	Total	28	100.0	100.0	

EmotionalStability_meanscore

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.50	3	10.7	10.7	10.7
	3.00	3	10.7	10.7	21.4
	3.50	2	7.1	7.1	28.6
	4.00	2	7.1	7.1	35.7
	4.50	3	10.7	10.7	46.4
	5.00	3	10.7	10.7	57.1
	5.50	4	14.3	14.3	71.4
	6.00	5	17.9	17.9	89.3
	6.50	1	3.6	3.6	92.9
	7.00	2	7.1	7.1	100.0
	Total	28	100.0	100.0	

Openness_meanscore

	Openiness_meanscore				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.00	2	7.1	7.1	7.1
	4.50	4	14.3	14.3	21.4
	5.00	3	10.7	10.7	32.1
	5.50	6	21.4	21.4	53.6
	6.00	3	10.7	10.7	64.3
	6.50	6	21.4	21.4	85.7
	7.00	4	14.3	14.3	100.0
	Total	28	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	36.00	1	3.6	3.6	3.6
	41.00	1	3.6	3.6	7.1
	42.00	2	7.1	7.1	14.3
	43.00	2	7.1	7.1	21.4
	44.00	1	3.6	3.6	25.0
	46.00	1	3.6	3.6	28.6
	48.00	1	3.6	3.6	32.1
	49.00	1	3.6	3.6	35.7
	50.00	2	7.1	7.1	42.9
	52.00	4	14.3	14.3	57.1
	54.00	4	14.3	14.3	71.4
	55.00	3	10.7	10.7	82.1
	57.00	1	3.6	3.6	85.7
	58.00	1	3.6	3.6	89.3
	60.00	1	3.6	3.6	92.9
	61.00	1	3.6	3.6	96.4
	62.00	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Extraversion_mean (Binned)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	19	67.9	67.9	67.9
	2	9	32.1	32.1	100.0
	Total	28	100.0	100.0	

Agreeableness_mean (Binned)

Agreeableness_mean (bilined)						
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1	18	64.3	64.3	64.3	
	2	10	35.7	35.7	100.0	
	Total	28	100.0	100.0		

Conscientiousness_mean (Binned)

Conscionated Internation						
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1	17	60.7	60.7	60.7	
	2	11	39.3	39.3	100.0	
	Total	28	100.0	100.0		

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Emotionalstability_mean (Binned)

	y = (y				
_		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	57.1	57.1	57.1
	2	12	42.9	42.9	100.0
	Total	28	100.0	100.0	

Openness_mean (Binned)

		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1	15	53.6	53.6	53.6	
	2	13	46.4	46.4	100.0	
	Total	28	100.0	100.0		

Reliability Statistics

Trememory Commence						
Cronbach's Alpha	N of Items					
.680	10					

Appendix 19: Personal Involvement Scale Analyses

Statistics

INVOLVE_meanscore

N	Valid	28
	Missing	0
Mean		5.2179
Median		5.5500
Mode		4.10 ^a
Minimum		2.20
Maximum	ı	6.90

a. Multiple modes exist. The smallest value is shown

INVOLVE_meanscore

	Frequency Percent Valid Percent Cumulative Perce					
Valid	2.20	1	3.6	3.6	3.6	
	3.00	1	3.6	3.6	7.1	
	3.20	1	3.6	3.6	10.7	
	3.70	1	3.6	3.6	14.3	
	4.10	2	7.1	7.1	21.4	
	4.70	1	3.6	3.6	25.0	
	4.80	1	3.6	3.6	28.6	
	5.10	1	3.6	3.6	32.1	
	5.20	2	7.1	7.1	39.3	
	5.40	2	7.1	7.1	46.4	
	5.50	1	3.6	3.6	50.0	
	5.60	2	7.1	7.1	57.1	
	5.70	1	3.6	3.6	60.7	
	5.80	2	7.1	7.1	67.9	
	5.90	2	7.1	7.1	75.0	
	6.00	1	3.6	3.6	78.6	
	6.10	1	3.6	3.6	82.1	
	6.20	2	7.1	7.1	89.3	
	6.40	2	7.1	7.1	96.4	
	6.90	1	3.6	3.6	100.0	
	Total	28	100.0	100.0		

_					
c.	1-	4	ŧ١	CS	۰

_		Affective_meanscore	Cognitive_meanscore
N	Valid	28	28
	Missing	0	0
Mean		4.7071	5.7286
Median		5.1000	6.0000
Mode		5.20	5.80 ^a
Minimum		1.00	2.40
Maximum		6.80	7.00

a. Multiple modes exist. The smallest value is shown

Frequency Table

Affective meanscore

	Affective_meanscore					
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	1.00	1	3.6	3.6	3.6	
	1.60	1	3.6	3.6	7.1	
	2.60	1	3.6	3.6	10.7	
	3.40	1	3.6	3.6	14.3	
	3.60	1	3.6	3.6	17.9	
	3.80	1	3.6	3.6	21.4	
	4.00	1	3.6	3.6	25.0	
	4.20	1	3.6	3.6	28.6	
	4.40	1	3.6	3.6	32.1	
	4.80	3	10.7	10.7	42.9	
	5.00	2	7.1	7.1	50.0	
	5.20	5	17.9	17.9	67.9	
	5.40	2	7.1	7.1	75.0	
	5.60	1	3.6	3.6	78.6	
	5.80	2	7.1	7.1	85.7	
	6.00	3	10.7	10.7	96.4	
	6.80	1	3.6	3.6	100.0	
	Total	28	100.0	100.0		

Cognitive_meanscore

Cognitive_meanscore							
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	2.40	1	3.6	3.6	3.6		
	2.80	1	3.6	3.6	7.1		
	4.20	1	3.6	3.6	10.7		
	4.40	1	3.6	3.6	14.3		

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	-	•		
4.80	1	3.6	3.6	17.9
5.20	1	3.6	3.6	21.4
5.40	2	7.1	7.1	28.6
5.60	2	7.1	7.1	35.7
5.80	3	10.7	10.7	46.4
6.00	3	10.7	10.7	57.1
6.20	2	7.1	7.1	64.3
6.40	3	10.7	10.7	75.0
6.60	2	7.1	7.1	82.1
6.80	3	10.7	10.7	92.9
7.00	2	7.1	7.1	100.0
Total	28	100.0	100.0	

INVOLVEMENT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	22.00	1	3.6	3.6	3.6
	30.00	1	3.6	3.6	7.1
	32.00	1	3.6	3.6	10.7
	37.00	1	3.6	3.6	14.3
	41.00	2	7.1	7.1	21.4
	47.00	1	3.6	3.6	25.0
	48.00	1	3.6	3.6	28.6
	51.00	1	3.6	3.6	32.1
	52.00	2	7.1	7.1	39.3
	54.00	2	7.1	7.1	46.4
	55.00	1	3.6	3.6	50.0
	56.00	2	7.1	7.1	57.1
	57.00	1	3.6	3.6	60.7
	58.00	2	7.1	7.1	67.9
	59.00	2	7.1	7.1	75.0
	60.00	1	3.6	3.6	78.6
	61.00	1	3.6	3.6	82.1
	62.00	2	7.1	7.1	89.3
	64.00	2	7.1	7.1	96.4
	69.00	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	50.0	50.0	50.0
	2	14	50.0	50.0	100.0
	Total	28	100.0	100.0	

Reliability Statistics

, ,						
Cronbach's Alpha	N of Items					
.906	10					

Appendix 20: Dispositional Trust Analyses

Frequencies

Statistics

 DTrust_meanscore

 N
 Valid
 28

 Missing
 0

 Mean
 3.9719

 Median
 3.8929

 Mode
 4.64

 Minimum
 2.57

 Maximum
 5.07

DTrust	meanscore

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.57	1	3.6	3.6	3.6
	2.86	1	3.6	3.6	7.1
	2.93	1	3.6	3.6	10.7
	3.14	1	3.6	3.6	14.3
	3.21	2	7.1	7.1	21.4
	3.43	1	3.6	3.6	25.0
	3.57	1	3.6	3.6	28.6
	3.64	2	7.1	7.1	35.7
	3.71	1	3.6	3.6	39.3
	3.79	2	7.1	7.1	46.4
	3.86	1	3.6	3.6	50.0
	3.93	1	3.6	3.6	53.6
	4.14	1	3.6	3.6	57.1
	4.21	1	3.6	3.6	60.7
	4.29	1	3.6	3.6	64.3
	4.36	1	3.6	3.6	67.9
	4.57	1	3.6	3.6	71.4
	4.64	3	10.7	10.7	82.1
	4.71	2	7.1	7.1	89.3
	4.93	1	3.6	3.6	92.9
	5.00	1	3.6	3.6	96.4
	5.07	1	3.6	3.6	100.0

Total	28	100.0	100.0	

DISPOSITION_TRUST

DISPOSITION_TRUST					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	36.00	1	3.6	3.6	3.6
	40.00	1	3.6	3.6	7.1
	41.00	1	3.6	3.6	10.7
	44.00	1	3.6	3.6	14.3
	45.00	2	7.1	7.1	21.4
	48.00	1	3.6	3.6	25.0
	50.00	1	3.6	3.6	28.6
	51.00	2	7.1	7.1	35.7
	52.00	1	3.6	3.6	39.3
	53.00	2	7.1	7.1	46.4
	54.00	1	3.6	3.6	50.0
	55.00	1	3.6	3.6	53.6
	58.00	1	3.6	3.6	57.1
	59.00	1	3.6	3.6	60.7
	60.00	1	3.6	3.6	64.3
	61.00	1	3.6	3.6	67.9
	64.00	1	3.6	3.6	71.4
	65.00	3	10.7	10.7	82.1
	66.00	2	7.1	7.1	89.3
	69.00	1	3.6	3.6	92.9
	70.00	1	3.6	3.6	96.4
	71.00	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

DTRUST_mean

DINGOI_mean						
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	2.62	1	3.6	3.6	3.6	
	2.92	1	3.6	3.6	7.1	
	3.00	1	3.6	3.6	10.7	
	3.15	1	3.6	3.6	14.3	
	3.31	2	7.1	7.1	21.4	
	3.38	1	3.6	3.6	25.0	
	3.54	1	3.6	3.6	28.6	
	3.62	1	3.6	3.6	32.1	

3.69	1	3.6	3.6	35.7
3.77	1	3.6	3.6	39.3
3.85	2	7.1	7.1	46.4
3.92	1	3.6	3.6	50.0
4.00	1	3.6	3.6	53.6
4.23	2	7.1	7.1	60.7
4.38	1	3.6	3.6	64.3
4.46	1	3.6	3.6	67.9
4.62	1	3.6	3.6	71.4
4.69	2	7.1	7.1	78.6
4.77	1	3.6	3.6	82.1
4.92	3	10.7	10.7	92.9
5.08	1	3.6	3.6	96.4
5.31	1	3.6	3.6	100.0
Total	28	100.0	100.0	

DTRUST_mean (Binned)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	50.0	50.0	50.0
	2	14	50.0	50.0	100.0
	Total	28	100.0	100.0	

Reliability Statistics

Cronbach's Alpha	N of Items
.496	14

Appendix 21: Stepwise Regression of Personal Characteristics and Online Review Reading Behaviour

	Model Summary								
					Change Statistics				
			Adjusted R	Std. Error of the	R Square				Sig. F
Model	R	R Square	Square	Estimate	Change	F Change	df1	df2	Change
1	.374ª	.140	.107	.08687	.140	4.240	1	26	.050

a. Predictors: (Constant), DTRUST_mean

	ANOVA ^a								
Model		Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	.032	1	.032	4.240	.050 ^b			
	Residual	.196	26	.008					
	Total	.228	27						

- a. Dependent Variable: percentage_source_hits
- b. Predictors: (Constant), DTRUST_mean

	Coefficients ^a							
					Standardized			
			Unstandardize	ed Coefficients	Coefficients			
	Model		В	Std. Error	Beta	t	Sig.	
	1	(Constant)	.315	.094		3.360	.002	
L		DTRUST_mean	047	.023	374	-2.059	.050	

a. Dependent Variable: percentage_source_hits

Regression

	Model Summary								
					Change Statistics				
			Adjusted R	Std. Error of the	R Square				Sig. F
Model	R	R Square	Square	Estimate	Change	F Change	df1	df2	Change
1	.389ª	.151	.119	.09081	.151	4.630	1	26	.041

a. Predictors: (Constant), DTRUST $_$ mean

Α	NC)VA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.038	1	.038	4.630	.041 ^b
	Residual	.214	26	.008		
	Total	.253	27			

a. Dependent Variable: percentage_review_hits

Coefficients^a

				Standardized		
		Unstandardize	ed Coefficients	Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.661	.098		6.743	.000
	DTRUST_mean	.051	.024	.389	2.152	.041

a. Dependent Variable: percentage_review_hits

Regression

Model Summary

					Change Statistics				
			Adjusted R	Std. Error of the	R Square				Sig. F
Model	R	R Square	Square	Estimate	Change	F Change	df1	df2	Change
1	.408ª	.167	.135	139.70107	.167	5.200	1	26	.031

a. Predictors: (Constant), Emotionalstability_mean

$\textbf{ANOVA}^{\textbf{a}}$

_						
M	odel	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	101477.200	1	101477.200	5.200	.031 ^b
	Residual	507426.141	26	19516.390		ı
	Total	608903.341	27			

a. Dependent Variable: SECONDS

b. Predictors: (Constant), Emotionalstability_mean

Coefficients

		Unstandardize	ed Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	35.688	95.198		.375	.711
	Emotionalstability_mean	44.074	19.328	.408	2.280	.031

a. Dependent Variable: SECONDS

Appendix 22: Logistic Regression for Personal Characteristics and Coded Online Review Reading Behaviour

Case Processing Summary

		N	Marginal Percentage
scrollandread_01	.00	14	50.0%
	1.00	14	50.0%
Valid		28	100.0%
Missing		0	
Total		28	
Subpopulation		28ª	

a. The dependent variable has only one value observed in 28 (100.0%) subpopulations.

Step Summary

			Model Fitting Criteria		Effect Selection Tests		ests	
Model	Action	Effect(s)	AIC	BIC	-2 Log Likelihood	Chi- Square ^{a,b}	df	Sig.
Step 0 0	Entered	Intercept	40.816	42.148	38.816			
Step 1 1	Entered	INVOLVE_mean	38.475	41.139	34.475	4.342	1	.037

Stepwise Method: Forward Stepwise

Model Fitting Information

		Model Fitting Cri	teria	Likelihood Ratio Tests			
Model	AIC	BIC	-2 Log Likelihood	Chi-Square	df	Sig.	
Intercept Only	40.816	42.148	38.816				
Final	38.475	41.139	34.475	4.342	1	.037	

a. The chi-square for entry is based on the likelihood ratio test.

b. The chi-square for removal is based on the likelihood ratio test.

Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	26.726	26	.424
Deviance	34.475	26	.123

Pseudo R-Square

Cox and Snell	.144
Nagelkerke	.192
McFadden	.112

Likelihood Ratio Tests

	Model Fitting Criteria				Likelihood Ratio Tests			
Effect	AIC of Reduced Model	BIC of Reduced Model	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.		
Intercept	40.644	41.976	38.644	4.170	1	.041		
INVOLVE_mean	40.816	42.148	38.816	4.342	1	.037		

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Parameter Estimates

								95% Confide	
scrollar	ndread_01ª	В	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
.00	Intercept	4.331	2.465	3.088	1	.079			
	INVOLVE_mea	820	.452	3.290	1	.070	.440	.181	1.068

a. The reference category is: 1.00.

Classification

	Predicted				
Observed	.00	1.00	Percent Correct		

.00	6	8	42.9%
1.00	5	9	64.3%
Overall Percentage	39.3%	60.7%	53.6%

Case Processing Summary

		N	Marginal Percentage
readreviewsinorder_01	.00	10	35.7%
	1.00	18	64.3%
Valid		28	100.0%
Missing		0	
Total		28	
Subpopulation		28ª	

a. The dependent variable has only one value observed in 28 (100.0%) subpopulations.

Step Summary

				Model Fitting Criteria			Effect Selection Tests		
Model		Action	Effect(s)	AIC	BIC	-2 Log Likelihood	Chi- Square ^{a,b}	df	Sig.
Step 0	0	Entered	Intercept	38.498	39.831	36.498			
Step 1	1	Entered	LOT_mean	31.208	33.873	27.208	9.290	1	.002
Step 2	2	Entered	INVOLVE_mean	29.129	33.126	23.129	4.079	1	.043

Stepwise Method: Forward Stepwise

- a. The chi-square for entry is based on the likelihood ratio test.
- b. The chi-square for removal is based on the likelihood ratio test.

Model Fitting Information

Model	Model Fitting Criteria	Likelihood Ratio Tests
	-	

	AIC	BIC	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	38.498	39.831	36.498			
Final	29.129	33.126	23.129	13.369	2	.001

Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	22.643	25	.598
Deviance	23.129	25	.570

Pseudo R-Square

Cox and Snell	.380
Nagelkerke	.521
McFadden	.366

Likelihood Ratio Tests

		Model Fitting Criteria	Likelihood Ratio Tests			
Effect	AIC of Reduced Model	BIC of Reduced Model	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	39.247	41.912	35.247	12.118	1	.000
INVOLVE_mean	31.208	33.873	27.208	4.079	1	.043
LOT_mean	39.543	42.208	35.543	12.414	1	.000

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

Parameter Estimates

								95% Confide	
readrevie	ewsinorder_01ª	В	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
.00	Intercept	21.320	8.512	6.273	1	.012			
	INVOLVE_mea	-1.044	.569	3.369	1	.066	.352	.115	1.073

LOT_mean	-4.558	1.777	6.579	1	.010	.010	.000	.341

a. The reference category is: 1.00.

Classification

	Predicted					
Observed	.00	1.00	Percent Correct			
.00	6	4	60.0%			
1.00	3	15	83.3%			
Overall Percentage	32.1%	67.9%	75.0%			

Case Processing Summary

		<u> </u>	
		N	Marginal Percentage
scrolldocbeforereading_01	.00	12	42.9%
	1.00	16	57.1%
Valid		28	100.0%
Missing		0	
Total		28	
Subpopulation		28ª	

a. The dependent variable has only one value observed in 28 (100.0%) subpopulations.

Step Summary

				Model Fitting Criteria		Effect	t Selection Te	sts	
						-2 Log			
Model		Action	Effect(s)	AIC	BIC	Likelihood	Chi-Square ^{a,b}	df	Sig.
Step 0	0	Entered	Intercept	40.243	41.575	38.243			
Step 1	1	Entered	DTRUST_mean	38.314	40.979	34.314	3.929	1	.047

Stepwise Method: Forward Stepwise

- a. The chi-square for entry is based on the likelihood ratio test.
- b. The chi-square for removal is based on the likelihood ratio test.

Model Fitting Information

	Model Fitting Criteria			Likelihood Ratio Tests			
Model	AIC	BIC	-2 Log Likelihood	Chi-Square	df	Sig.	
Intercept Only	40.243	41.575	38.243				
Final	38.314	40.979	34.314	3.929	1	.047	

Goodness-of-Fit

	Chi-Square	df	Sig.	
Pearson	27.735	26	.372	

Deviance	34.314	26	.127

 Pseudo R-Square

 Cox and Snell
 .131

 Nagelkerke
 .176

 McFadden
 .103

Likelihood Ratio Tests

		Model Fitting Criteria	Like	elihood Ratio Te	ests	
			-2 Log Likelihood of			
Effect	AIC of Reduced Model	BIC of Reduced Model	Reduced Model	Chi-Square	df	Sig.
Intercept	39.640	40.972	37.640	3.326	1	.068
DTRUST_mean	40.243	41.575	38.243	3.929	1	.047

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

_	Parameter Estimates								
								95% Confide	
scrollo	docbeforereading_01ª	В	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
.00	Intercept	4.240	2.470	2.948	1	.086			
	DTRUST_mea n	-1.131	.613	3.402	1	.065	.323	.097	1.073

a. The reference category is: 1.00.

Classification

	Predicted						
Observed	.00	1.00	Percent Correct				
.00	6	6	50.0%				
1.00	4	12	75.0%				
Overall Percentage	35.7%	64.3%	64.3%				

Case Processing Summary

		N	Marginal Percentage
ratings_01	.00	11	39.3%
	1.00	17	60.7%
Valid		28	100.0%
Missing		0	
Total		28	
Subpopulation		28ª	

a. The dependent variable has only one value observed in 28 (100.0%) subpopulations.

Step Summary

			Model Fitting Criteria			Effect Selection Tests			
						-2 Log			
Model		Action	Effect(s)	AIC	BIC	Likelihood	Chi-Square ^{a,b}	df	Sig.
Step 0	0	Entered	Intercept	39.521	40.853	37.521			
Step 1	1	Entered	THINK_mean	36.484	39.148	32.484	5.037	1	.025

Stepwise Method: Forward Stepwise

- a. The chi-square for entry is based on the likelihood ratio test.
- b. The chi-square for removal is based on the likelihood ratio test.

Model Fitting Information

		Model Fitting Cri	teria	Likelihood Ratio Tests			
Model	AIC	BIC	-2 Log Likelihood	Chi-Square	df	Sig.	
Intercept Only	39.521	40.853	37.521				
Final	36.484	39.148	32.484	5.037	1	.025	

Goodness-of-Fit

Cocurous of the							
	Chi-Square	df	Sig.				
Pearson	27.927	26	.362				
Deviance	32.484	26	.178				

Pseudo R-Square

Cox and Snell	.165
Nagelkerke	.223
McFadden	.134

Likelihood Ratio Tests

		Model Fitting Criteria	Like	elihood Ratio Te	ests	
	-2 Log		-2 Log Likelihood of			
Effect	AIC of Reduced Model	BIC of Reduced Model	Reduced Model	Chi-Square	df	Sig.
Intercept	38.854	40.186	36.854	4.370	1	.037
THINK_mean	39.521	40.853	37.521	5.037	1	.025

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

		Parameter	Estimates
--	--	-----------	------------------

	Tarameter Estimates								
								95% Confide	
ratings	:_01ª	В	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
.00	Intercept	7.141	3.778	3.573	1	.059			
	THINK_mea	-1.452	.727	3.988	1	.046	.234	.056	.973

a. The reference category is: 1.00.

Classification

01							
Observed	Producted						

	.00	1.00	Percent Correct
.00	5	6	45.5%
1.00	2	15	88.2%
Overall Percentage	25.0%	75.0%	71.4%

Case Processing Summary

Case i rocessing duminary							
			N	Marginal Percentage			
source_01	.00		3	10.7%			
	1.00		25	89.3%			
Valid			28	100.0%			
Missing			0				
Total			28				
Subpopulation			28ª				

a. The dependent variable has only one value observed in 28 (100.0%) subpopulations.

Step Summary

Step Guilliary									
				Model Fitting Criteria		Effec	t Selection Te	ests	
						-2 Log	Chi-		
Model		Action	Effect(s)	AIC	BIC	Likelihood	Square ^{a,b}	df	Sig.
Step 0	0	Entered	Intercept	21.068	22.400	19.068			
Step 1	1	Entered	Openness_mean	18.702	21.366	14.702	4.366	1	.037

Stepwise Method: Forward Stepwise

- a. The chi-square for entry is based on the likelihood ratio test.
- b. The chi-square for removal is based on the likelihood ratio test.

Model Fitting Information

	Model Fitting Criteria			Likelihood Ratio Tests			
Model	AIC	BIC -2 Log Likelihood		Chi-Square	df	Sig.	
Intercept Only	21.068	22.400	19.068				
Final	18.702	21.366	14.702	4.366	1	.037	

Goodness-of-Fit

	Chi-Square	df	Sig.	
Pearson	21.042	26	.740	
Deviance	14.702	26	.963	

Pseudo R-Square

Cox and Snell	.144
Nagelkerke	.292
McFadden	.229

Likelihood Ratio Tests	6
------------------------	---

Effect	Model Fitting Criteria	Likelihood Ratio Tests

			-2 Log Likelihood of	01.0		
	AIC of Reduced Model	BIC of Reduced Model	Reduced Model	Chi-Square	df	Sig.
Intercept	19.027	20.359	17.027	2.325	1	.127
Openness_mean	21.068	22.400	19.068	4.366	1	.037

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

				Parameter	Estimates				
								95% Confide	
source	e_01ª	В	Std. Error	Wald	df	Sig.	Exp(B)	Lower Bound	Upper Bound
.00	Intercept	6.446	4.726	1.861	1	.173			
	Openness_mea	-1.654	.976	2.874	1	.090	.191	.028	1.295

a. The reference category is: 1.00.

Classification

	Predicted							
Observed	.00	1.00	Percent Correct					
.00	0	3	0.0%					
1.00	0	25	100.0%					
Overall Percentage	0.0%	100.0%	89.3%					