CONVERSATIONAL HUMAN VOICE WORKS!
THE EFFECT OF WEBCARE IN SOCIAL NETWORKS

MASTER THESIS
Yasmin Schneider

FACULTY OF BEHAVIOURAL SCIENCES
COMMUNICATION STUDIES

EXAMINATION COMMITTEE
Dr. S.A. de Vries
Dr. E. Constantinides

UNIVERSITY OF TWENTE.

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Faculty of Behavioural Sciences
Supervisors: Dr. S.A. de Vries
                    Dr. E. Constantinides

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Submitted by: Yasmin Schneider
                    Sudermanplatz 4
                    50670 Cologne, Germany
Phone: +49 1712992232
Email: yasmin.schneider@gmx.net
Student ID: s1341340

Management Summary

Social networking sites provide customers and companies the opportunity to engage in a dialogue. Platforms such as Facebook facilitate that dialogue. The chance to address experiences with products or services of a positive or negative nature is used by many customers. For companies, this means, for instance, reacting to such feedback as the dialogical character of a chosen channel. Therefore, concepts of Webcare have been developed that help companies meet their customers' demand for online conversation.

From the companies' standpoint, while constantly facing the challenge of ensuring that their brands are perceived as intended, the growing use of social networking sites as feedback platforms is a source of concern. They fear that the amount of negative feedback that is addressed could erode brand perceptions, due to inconsistencies in traditional corporate product and service presentations and a perception created by consumers' negative displays in social networks. So far, studies have not yet examined whether these concerns are justified in the context of social networking sites. This research gap provided a starting point for us to shed light on these concerns. It has also allowed us to formulate our research aim of investigating whether the degree of conversational human voice in communicating as a company in social networks affects customer-based reputation (CBR). This is in lieu of considering possible moderator effects of the credibility of a negative post and general skepticism toward corporate communication.

We derived our conceptual framework based on a combination of theoretical findings regarding Webcare and brand perceptions. We then conducted a quantitative online survey, which yielded 300 usable responses. Given the experimental design of our study and the consideration of multiple dependent variables, multivariate and univariate analysis of variance functioned as suitable statistical techniques to test our four hypotheses. The results of our study suggest that the condition of employment of 'conversational human voice' (CHV) results in a positive impact on CBR evaluation. We did not find evidence for the moderating effects of the interplay between levels of credibility of a negative post and the level of employed CHV in the answer. In addition to this, consumer skepticism towards corporate communication mediated CBR evaluation, but nonetheless did skeptical consumers evaluate more positive on CBR when being confronted with CHV.

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List of Abbreviations

SNS	Social Networking Sites
CHV	Conversational Human Voice
CBR	Customer based Reputation
eWOM	electronic Word of Mouth
NWOM	Negative Word of Mouth
PWOM	Positive Word of Mouth
ANOVA(s)	Analysis of variance(s)

List of Symbols

F	F-value
N	Sample size
n	Subsample size
p	Significance value
t	t-value
α	Cronbach's alpha
η	Partial eta squared

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1. Introduction

The advent of companies' presence on social networking sites (SNS) has extended consumers' options for gathering unbiased product experience from other consumers and provides the opportunity for consumers to offer their own consumption-related advice on SNS. Companies successfully use social media as an interaction channel and as an instrument for new, customer-oriented value-added models. Indeed, the speed and ubiquity of social media has rendered corporate communication as constant dialogue between an organization and its audience (Carim & Warwick, 2013). Professionals see these open, and most of the time uncontrolled, dialogues on social media and the ease of dissemination of information as a possible threat to the reputation of organizations (Verhoeven, Tench, Zerfass, Moreno, & Verčič, 2012). Stakeholders can easily spread negative reports or complaints to companies' social media sites, reports that can be further distributed rapidly by other social media users. Organizations are thereby holding less control over the information that stakeholders have at their disposal and, in turn, corporate reputation is more vulnerable than ever.

Concepts of social media reputation indexes have been developed using data from various social media sources to combine into a collective predictor of their influence on corporate reputation. However, only limited research has been conducted to evaluate single concepts used by companies to manage such dialogical customer feedback on SNS.

As SNS offer the opportunity for open and direct dialogue between customer and company, it enables the chance for companies to intervene and contain the impact that customers' SNS posts, or online reviews, can have on other customers and their evaluation of a corporation's reputation. To do so, companies have developed communication strategies on how to react to such feedback, or so called concepts of Webcare.

Increasingly, stakeholders are demanding of organizations to engage in conversation with them (Taylor & Perry, 2005; Grunig, 2009). Consequently, it is important to acknowledge the difference in communication styles on social media and traditional media. Social media communication is two-sided and employs a direct nature of communication between the organization and stakeholder (Taylor & Perry, 2005). Within computer-mediated settings, a human conversational style or conversational human voice (CHV) within Webcare is proven to have a positive effect on trust and stakeholder involvement in an organization, especially in crisis situations (Beldad, de Jong, & Steehouder, 2010; Kelleher, 2009; Sweetser & Metzgar, 2007; van Noort & Willemsen, 2012).

The study at hand will investigate managing customer reviews on SNS with Webcare concepts that employ CHV. As an electronic form of word of mouth (eWOM), online reviews provide a trusted source of product information for consumers. The first purpose of the present study is to broaden understanding about the effects of online reviews seen on SNS. More precisely, this concerns the effects of how organizational responses to negative online reviews influence other consumers in their evaluation of an organizations' reputation. As a potential moderator, consumer skepticism will be employed. Consumers tend to be skeptical toward both corporate communication and online from strangers. Existing research provides knowledge on how extended consumer reviews on blogs influence other customers in their evaluation of a company's reputation; however, no research has been conducted on the massive quantitative impact of short consumer reviews found on SNS. Because of the informality of posts, it will be critical to assess how consumers make evaluations on the credibility of negative consumer reviews on SNS. Then, as a second contributor to the measurement of consumer skepticism, attitudes toward corporate communication will be queried. In the end, a full picture of the degree of skepticism of an observing consumer will be seen as well as how the consumer evaluates a corporation's reputation.

In a scientific manner, this study will contribute to the field of Webcare research and its different applications. Herein, it will be beneficial to study the relevance of CHV as an essential part of Webcare on SNS. Moreover, the field of study for Webcare in SNS is limited. This research will contribute to this field and will derive meaningful insights for practical implications on how to manage organizational communication on SNS, therein revealing valuable information about user expectations and their communication behavior.

Research Question: *What is the effect of conversational human voice in Webcare if an observing customer is exposed to negative word of mouth*?

The study consists of five parts. First, an overview of brand image and corporate reputation, electronic word of mouth and consumer skepticism, Webcare concepts and conversational human voice is presented. Second, the model and variables used to investigate the relationships between these concepts are described and explained. Third, the empirical study and experimental design are displayed. Then, the results of the investigation are presented and analyzed. Finally, a discussion of managerial implications concerning the use of conversational human voice in Webcare concepts on social networking sites, and future research related to these concepts are provided.

2. Theoretical Background

2.1 Brand Image and Corporate Reputation

Brand image has been defined as the consumer's mental picture of an offering (Dobni & Zinkhan, 1990). It is related to an organization's various physical and behavioral attributes, such as business name, architecture, variety of products/services, tradition, ideology, and impression of quality communicated by each person interacting with the firm's clients (Nguyen & Leblanc, 2001). In business markets, image can also be expected to play an important role, especially where it is difficult to differentiate products or services based on tangible quality features (Mudambi, Doyle, & Wong, 1997).

Corporate reputation has been defined by Fombrun, Gardberg, and Sever (2000) as "a collective representation of a firm's past behavior and outcomes that depicts the firm's ability to render valued results to multiple stakeholders" (p. 243). Corporate reputation may be viewed as a mirror of the firm's history, which serves to communicate information to its target groups regarding the quality of its products or services in comparison with those of its competitors (Yoon, Guffey, & Kijewski, 1993). According to Wartick (1992), corporate reputation is an "aggregation of a single stakeholder's perceptions of how well organizational responses are meeting the demands and expectations of many organizational stakeholders" (p. 34).

Market researchers have recognized the critical roles of brand image and corporate reputation in customers' buying behavior (Barich & Kotler, 1990) (Nguyen & Leblanc, 2001). Both constructs are particularly important in developing and maintaining customer loyalty (Dick & Basu, 1994; Porter, 2008, Nguyen & Leblanc, 2001). Brand image and corporate reputation are generally considered as two distinct constructs that may be strongly related, given the idea that image and reputation are two socially constructed entities and derived essentially from the customer's perception of a firm (Nguyen & Leblanc, 2001). Often related to symbols and values, the building of an image is a lengthy process, which can be improved rapidly by technological breakthroughs and unexpected achievements or, conversely, destroyed by neglecting the needs and expectations of the various groups who interact with the firm (Herbig, Milewicz, & Golden, 1994; Nguyen & Leblanc, 2001).

Based on the meaning that is generally accepted for each concept, it is observable that both image and reputation are the external perceptions of the firm. The former is the firm's portrait made in the mind of a consumer, while the latter is the degree of trust (or distrust) in a firm's ability to meet customers' expectations on a given attribute. Image and reputation are thus the results of an aggregation process that incorporates diverse information used by the consumer to form a perception of the firm. Even for a consumer who has not yet had experience with the firm, these perceptions may be formed from other sources of information such as advertising or word of mouth (Nguyen & Leblanc, 2001).

Walsh and Beatty (2007) define a concept called customer-based reputation (CBR), which especially captures an attitude-like judgment to evaluate corporate reputation. They claim that corporate reputation may be viewed as a customer's evaluation that results from either or both of his or her personal interaction experiences with the service firm, as well as from reputation-relevant information received about the firm. With respect to the closely linked concepts of image and corporate reputation, CBR will serve as an instrument to measure a certain "quality promise" of companies and will be used as a concept that can most closely evaluate reputation from a consumer perspective. The CBR sub scales are represented by four variables: Customer satisfaction, loyalty, trust and word of mouth. In the scope of this research, the dimensions of loyalty and satisfaction will not be queried, as both do require specific customer-company relations in order to answer them. Because we intend to measure attitudes of observing potential customers, it is not a prerequisite to have been or being an active customer at this moment and therefore these two dimensions are left out of our methodological framework.

2.2   Electronic Word of Mouth and Consumer Skepticism

Online reviews have become an important information source that allow consumers to search for detailed and reliable information by sharing past consumption experiences (Gretzel, Fesenmaier, Lee, & Tussyadiah, 2011; Yoo & Gretzel, 2008). A study by Santos (2014) indicated that consumer reviews are particularly important in purchasing experiential goods and services because people find it difficult to assess the quality of intangible products before consumption (Liu & Park, 2015). Therefore, consumers tend to rely on user reviews, which allows them to obtain sufficient information and reduce their level of perceived uncertainty (Ye, Law, Gu, & Chen, 2011).

Dijkmans, Kerkhof, and Beukeboom (2015) refer to social media platforms as "uncontrolled arenas for participation" (p. 59), where users can freely spread their opinions about a company regarding operational or ethical issues, product quality or customer satisfaction. While in offline settings only a limited number of consumers may be exposed to negative word of mouth (NWOM), online settings provide the opportunity for a large number of consumers to easily access and spread negative information about companies, products, or services (Lee & Song, 2010). This may pose a risk of reputational damage for firms (Aula, 2010). Even a single unhappy customer can cause reputational damage via social media platforms, as shown in the case of "United Breaks Guitars" (Tripp & Grégoire, 2011).

Negative online interactions between consumers are found to have detrimental effects on all phases of the consumer decision-making process, including brand evaluation, brand choice, purchase behavior and brand loyalty (van Noort & Willemsen, 2012; Chevalier & Mayzlin, 2006; Chiou & Cheng, 2003; Vermeulen & Seegers, 2009; Van Noort & Willemsen, 2012). Additionally, the authors describe NWOM as a trigger event, which may negatively affect a substantial number of potential customers and argue that NWOM requires detection and intervention to control potential damage. In contrast, a study of East, Hammond, & Lomax, (2008) found, that positive word of mouth (PWOM) has a greater impact on brand purchase probability than NWOM. In connection to the dimension of word of mouth in CBR, it will be interesting to observe if a manipulated corporate reaction to NWOM can influence observing customers to ultimately sense a PWOM outcome of such witnessed situation.

A research of Laczniak, DeCarlo, & Ramaswami, (2001) found, that causal attributions mediate the NWOM-brand evaluation relation. They state, that consumers generate causal attributions in response to NWOM that subsequently influence brand evaluations. Existing literature suggests, that although online reviews provide easy access to information about products and services, they also foster consumer skepticism (Ayeh, Au, & Law, 2013). Readers of user-generated reviews are confronted with the task of evaluating the opinions of complete strangers (Litvin, Goldsmith, & Pan, 2008). The fact that this form of WOM is information from strangers whom the consumers have never met, and probably never will meet, casts doubt on the trustworthiness of these online messages (Sher, 2009). Credibility can simply be defined as believability of some information and/or its source. O'Keefe (2002) describes credibility as judgments made by perceivers regarding the believability of communicators. In this regard, consumers may not only be skeptical about creators of online reviews, but also the communication efforts of a company (Ford, Smith, & Swasy, 1990).

Therefore, consumer skepticism and credibility of read NWOM are important potential causal attributions to include in our model while determining the effects that both NWOM and Webcare efforts in intervening can have on the evaluation of CBR.

2.3   Webcare and Conversational Human Voice

To be able to detect and intervene in NWOM, companies must monitor user-generated feedback online before taking remedial action, namely Webcare. Van Noort and Willemsen (2012) claim that Webcare is gaining popularity as a brand communication tool and define Webcare, following the description of Hong and Lee (2005) and Kerkhof, Beukeboom, and Utz (2010), as "the act of engaging in online interactions with (complaining) consumers, by actively searching the web to address consumer feedback (e.g., questions, concerns and complaints). Webcare is performed by one or more company representatives (i.e., Webcare teams) and serves as a tool in support of customer relationship, reputation and brand management" (p. 133). Kerkhof et al. (2010) specify that Webcare can be either a reaction to specific requests from consumers to respond to their complaints (reactive Webcare) or posted proactively in response to NWOM (proactive Webcare), without a request from the complainant to respond.

Existing research on Webcare suggests that Webcare can engender positive responses in consumers after encountering NOWM. Both reactive and proactive Webcare is believed to mitigate the effects of NWOM (Hong & Lee, 2005; Lee & Song, 2010; van Laer & de Ruyter, 2010; Kerkhof et al., 2010; van Noort & Willemsen, 2012). The study by van Noort and Willemsen (2012) demonstrated that brands are expected to respond to consumers' online requests to solve issues and problems. This reactive approach of Webcare may lead to consumers sympathizing with a company, as it shows sensitivity to customers' issues and problems (Hong & Lee, 2005; van Laer & de Ruyter, 2010). Therefore, this study assumes that a reactive Webcare approach to a customer complaint on a social networking site will foster a positive evaluation of a company's reputation.

Proactive Webcare is more difficult to evaluate. Research suggests that if posted in a non-branded environment, it is in danger of being perceived as intrusive by consumers (van Noort & Willemsen, 2012). However, also if posted in branded environments, proactive approaches must consider the risk of consumers' skepticism, as it can be considered a form of self-advertisement, which is easy to detect by customers. Because proactive Webcare is likely to promise something to a customer that reactive Webcare could prove to be true (e.g., high

quality customer care), the interplay of reactive and proactive Webcare is assumed to have a positive impact on the evaluation of corporate reputation.

With respect to communicational concepts that companies can employ to mitigate negative NWOM and actively foster positive brand associations, reactive Webcare will be considered in the framework of a communicational concept employed by companies on SNS.

This study proposes that a positive outcome of reactive Webcare can be leveraged to an extent to which the customer perceives Webcare to demonstrate 'conversational human voice' (CHV). CHV is found to be important in creating favorable brand responses in computer-mediated communications (Kelleher & Miller, 2006). It is defined as: "an engaging and natural style of organizational communication as perceived by an organization's publics based on interactions between individuals in the organization and individuals in publics." (Kelleher, 2009, p. 177). Eleven Items that measure CHV, defined by Kelleher (2009) include that a company demonstrates a high level of CHV in its communications if it is open to dialog, welcomes conversational communication, and provides prompt feedback addressing criticism with a direct, but uncritical, manner. Through this communication style, brands "mimic one-to-one communication" and "humanize" the corporate voice (Kuhn, 2005). These characteristics of CHV can also be attributed to social presence theory, which states that an online medium with a high social presence will convey a social context and provide two-way communication and interaction (Cui, Lockee, & Meng, 2013). CHV is a concept that has been proven to foster computer-mediated relationships. Marketers on social media attempt to bring humanity and personality to organizational communication through the use of human representatives, personal pronouns and non-verbal cues (Kwon & Sung, 2011). Yet organizations oftentimes still seem to use a concept of professional voice in their communication on social media (Levine, Locke, Searls, & Weinberger, 2000) to retain organizational identity with all their communication activities through traditional and new media channels aligned.

2.4   Model Development

Research Question: *What is the effect of conversational human voice in Webcare if an observing customer is exposed to negative word of mouth*?

Social networking sites provide conditions of dialogical and conversational communication between a company and its customers. As described, companies have developed Webcare

concepts employing CHV to intervene in NWOM and meet customers' expectations of these communicational characteristics. This study proposes that CHV in Webcare concepts intervening in NWOM has a positive influence on the evaluation of CBR of other customers.
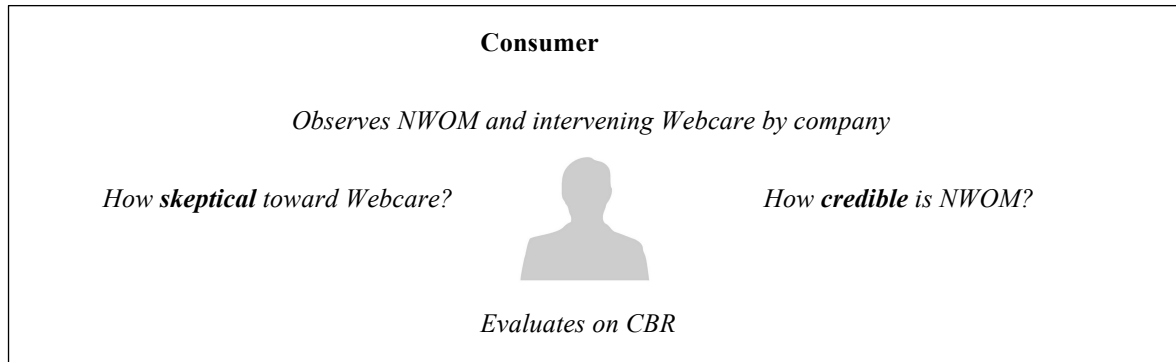
Figure 1: Setting of Model and Experiment

The main effect tested in this research will therefore be:

H1   If customers observe high/low CHV in Webcare intervening with NWOM, it influences the evaluation of CBR.

Baron and Kenny (1986) define a moderator variable as a third variable that changes the strength or direction of a relationship between an independent variable and a dependent variable. As described, CHV in Webcare is proposed to have an effect on the evaluation of other customers' CBR perceptions.

H2   When CHV is high in Webcare, it results in a positive impact on CBR.

H3   If CHV is low in Webcare, it results in a negative impact on CBR.

There are several reasons to assume a moderating effect of consumer skepticism in combination with communicational concepts on CBR evaluation. Based on the line of reasoning of consumer skepticism toward online reviews described by Sher (2009), and consumer skepticism toward corporate communicational efforts described by Ford et al. (1990), it is assumed that in an NWOM setting, observing customers are both skeptical toward the reviews they read and the Webcare that companies provide.

To measure skepticism toward NWOM that is read, source credibility will serve as a moderator. Therefore, two additional hypotheses in combination with H2 and H3 are to be tested:

*H2a   If **CHV is high** in Webcare **and source credibility is low in NWOM**, it will have a positive impact on the evaluation of CBR.*

> *(If CHV is high in Webcare and source credibility in NWOM is high, it will have no significant effect.)*

*H3a   If **CHV is low** in Webcare **and source credibility is high in NWOM**, it will have a negative impact on the evaluation of CBR.*

> *(If CHV is low in Webcare and source credibility is low in NWOM, it will have no significant effect.)*

To test skepticism toward Webcare, consumer skepticism will work as an underlying moderator, and the following hypothesis is added:

H4   People who are skeptical toward corporate communication will evaluate on average more negatively on CBR than people who are less skeptical.
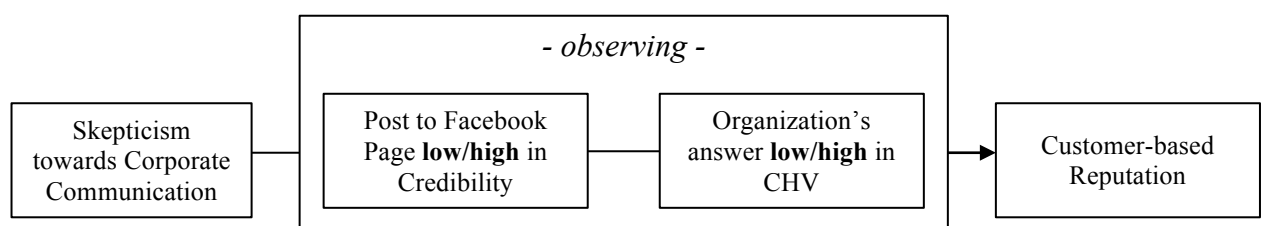
Figure 2: Conceptual Model

2.5   Control and Descriptive Variables

Continuous variables that are not an element of the main manipulation but can have an impact on dependent variable(s) are called control variables (Rutherford, 2011, p. 216). Thus, variables that potentially influence one or more of the thesis' dependent variables are identified as potential control variables. A simultaneous impact of the control variable on all dependent variables as a necessary condition in a first step is not considered.

Because of the before-mentioned close connection between corporate image and reputation, antecedents of brand image will serve as control variables to be able to describe certain outcomes of the following experiment. Brand attitude, which describes a consumer's overall negative or positive evaluation of a brand (Farquhar, 1989), is identified as a potential control variable. Existing research provides statistical evidence that there is a positive relationship between brand attitude and brand image (Chang & Chieng, 2006). Brand familiarity, which concerns one's prior experiences with a given brand (Jamal & Goode, 2001), represents the second control variable, since the literature suggests that brand image is positively influenced by brand familiarity (Martínez & de Chernatony, 2004).

To be able to later characterize the sample in more detail, several descriptive variables are included. In general, medium usage of SNS will be screened. Therein, the usage is queried, if corporate Facebook pages are followed and if the participant ever wrote a negative review on a Facebook page and several demographic queries.

3. Method

3.1 Setting

Service companies – like those in the tourism and travel industry – may be more vulnerable than other companies to risks of NWOM (Litvin et al., 2008), because of product characteristics of services. Service products are intangible, non-standardized and need to be consumed before they can be fully evaluated (Murray & Schlacter, 1990). This increases the chance of a gap between customer expectation and perception which, in turn, increases the chance of online customer complaint behavior on social media sites (Mitra, Reiss, & Capella, 1999). The impact of social media on reputation is particularly relevant in this setting because it increases the public's access to fellow travelers' experiences and accelerates the speed of information exchange (e.g., reactions to bad word of mouth information) (Floreddu, Cabiddu, & Evaristo, 2014).

Several airlines are among the most active companies worldwide that use social media ("Socially Devoted," 2014). At present, KLM is considered worldwide as a frontrunner in the commercial use of social media (Walker, 2014). The overall context of this research will be to examine a company's message to provide sincere customer care and service. KLM's recent social media campaign, #HappyToHelp, provides an excellent example of a communicational concept in Webcare. #HappyToHelp was a one-week campaign designed to demonstrate through action KLM's objective of delivering superior customer service to customers as well as non-customers. Selected problems were solved in a variety of ways, ranging from actual physical intervention (e.g., helping someone retrieve a forgotten passport and still make their flight) to providing customers one-to-one advice or information through social media (Carter, 2014).

3.2 Stimuli Selection and Creation

For the selection of a complaint reason to create an NWOM setting in the experiment, 'lost luggage' was chosen. The experiment setting will place participants in the situation of flying KLM not by choice, but by selection of a holiday package that they booked and are therefore searching for additional information on the airline.

For the selection of four different stimuli—high CHV, low CHV, high credibility, and low credibility—different antecedents from existing research literature served as the creating ground.

First, to create different postings of high and low in source credibility, antecedents of credibility introduced by (Morris, Counts, Roseway, Hoff, & Schwarz, 2012) were selected, namely: user name, user image, topic, and non-standard grammar/punctuation. For all four cases, the same gender-neutral name of 'Jamie Williams' was chosen, and the same image was used to create the image of an average verified account. The chosen topic was 'lost luggage'. For the case of low credibility, a poor use of grammar and punctuation was used, contrasting the case for high credibility. The topic was evaluated poorly in the low credibility post, whereas the high credibility post evaluates extensively.

Figure 3: Post High in Credibility

Figure 4: Post Low in Credibility

Next, to create two different organizational responses to a post on their SNS, the antecedents of CHV introduced by Kwon and Sung (2011) were used. As suggested, personal reference in the form of a signature was used, addressing the complainants personally, speaking in the first (I) and second (You) person and asking for feedback. Therefore, the answer high in CHV reads as follows:
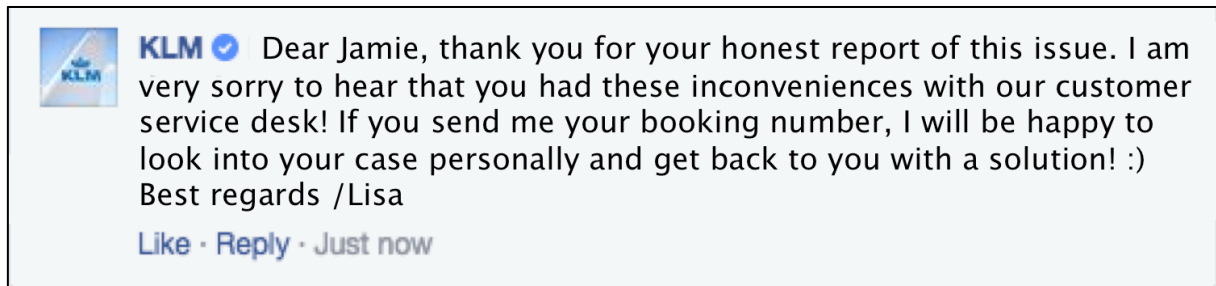
Figure 5: Answer High in CHV

Contrasting, the answer low in CHV does not employ any antecedents of CHV:

Figure 6: Answer low in CHV

3.3 Experimental Design

The main study is implemented in the form of a laboratory experiment. An experiment serves the investigation of causal relationships under controlled conditions (Altobelli, 2011, p.137). Since the underlying research goal aims at investigating the influence of communicational concepts on the impact of NWOM on corporate reputation, an experiment is regarded as a suitable additional method for this thesis. In this way, influences by disturbance variables can be reduced and the observed outcome can be clearly traced back to the manipulation undertaken by the researcher (Atteslander, 2010, p.181). The following conducted experiment is based on a 2 (source credibility high vs. low) x 2 (CHV high vs. low) factorial between-subjects design, which results in four different groups.

3.4 Procedure and Measures

An online-based questionnaire serves as the instrument for the collection of primary data. Online surveys combine the advantages of low costs, multiple distribution avenues, and the ability to collect a large amount of data at high speeds (Miller, 2006, p. 111). Possible downsides when using Internet research especially relate to the loss of control over the survey's setting or sample biases (see here and in the following Kraut et al., 2004, pp. 107–108). To compensate for these disadvantages, a larger sample than in other quantitative data collection methods is required. This questionnaire consists of several parts (a copy of the full questionnaire is presented in Appendix A). First, the awareness of the brand KLM is queried (screening question). Then, the respondents must indicate their brand attitude toward KLM. They are then randomly assigned to different scenarios, as described in chapter 3.5. After being exposed to the scenarios, participants must rate the brand in terms of CBR, therein the described two dimensions of trust and word of mouth. This is followed by a realism check. The last part of the questionnaire consists of questions concerning descriptive and control variables as well as demographics.

3.5 Operationalization of Variables and Scenario Description

All variables included in the conceptual framework as well as respondents' demographics are measured by the online questionnaire. As described in chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**, for the independent variables 'CHV' and 'credibility', two levels are decided. The first level is 'low CHV/credibility' and serves as the control/no treatment group. The second level comprises 'high CHV/credibility'. All participants receive the same introductory text. They must imagine a situation in which they find themselves on a SNS searching for information on the airline KLM, because they have found out that they are flying with KLM for their recently booked holiday.

First, participants are asked to evaluate on their attitude toward corporate communication, which represents a scale measurement of consumer skepticism. Then, randomly, a participant is selected for either the condition of observing a post to a Facebook page that is high in credibility or low in credibility. After, it is asked of all participants, regardless of the assigned post, to evaluate on the level of credibility of the observed post. Next, also at random, the participant will then read KLM's answer to the post, which is either low or high in CHV. Again, all participants regardless of the observed answer will be asked to evaluate on the

observed level of CHV. Then, every participant is asked to evaluate on CBR. Resulting from the 2 x 2 Design, four sample groups will emerge.
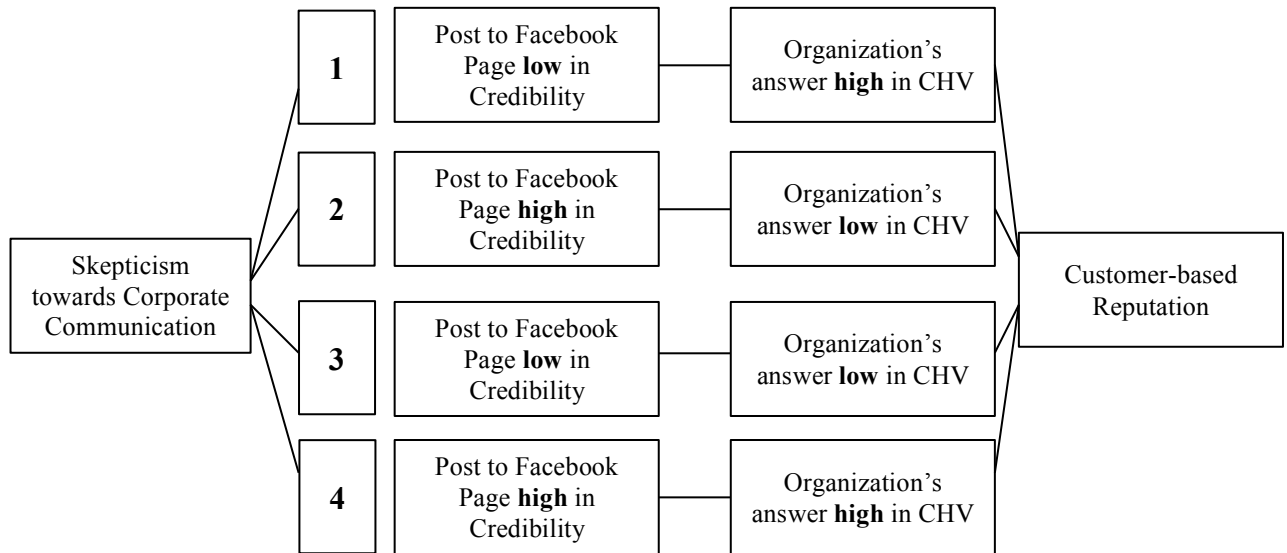
Figure 7: Experiment Scenarios

To measure the dependent and independent variables (skepticism, credibility, CHV, CBR), relevant scales were adopted from the respective literature. Primarily, multi-item scales were used because they are superior when it comes to representing complex constructs and are more valid and accurate compared to single-item scales (Carmines & McIver, 1981, p. 15). Mostly employed are 5-point Likert scales (with the anchors (1) = "strongly disagree" and (5) = "strongly agree"), which are accepted in social sciences as quasi-metric (Jaccard & Wan, 1996, p. 4). However, brand attitude, brand familiarity and credibility are measured with 7-point Likert semantic differentials. All scales contain at least three items, except the scale for brand awareness. An overview of all employed scales with their adapted wording and their sources can be found in Table 1 and Appendix B.

Table 1: Overview of Employed Scales, see Appendix B

Construct	Scale Adapted from
Brand Awareness & Brand Attitude	(Pappu, Quester, & Cooksey, 2005), (Kent & Allen, 1994), (MacKenzie & Lutz, 1989)
Consumer Skepticism	(Obermiller & Spangenberg, 1998)
Credibility	(McCroskey & Teven, 1999)
Conversational Human Voice	(Kelleher, 2009)
Customer Based Reputation	(Walsh & Beatty, 2007)

3.6 Sample Demographics and Characteristics

The online survey was distributed on Facebook. A total of 475 persons began the questionnaire and 300 of them finished the entire survey. In total, the convenience sample comprises 162 female (54%) and 138 male (46%) respondents out of 300. The participants' ages ranged from 13 to 60 years, with a mean age of 29,3 years. The largest age group is made up the 19–25 and 26–35 age groups. Regarding occupation, the largest group is made up of employees (62%) followed by students (30.7 %), which appears in accordance with the two largest age groups. Additionally, in accordance with the large group of employees and students, are the large groups of educational achievement of bachelor's (40%) and master's (34.3%) degrees. The current total years' income minimum group of less than 10.000 Euro per year shows the largest figure (21.7%), which could reflect the group of currently enrolled students. The other income groups show no significant differences in size.

Table 2: Sample Demographics

Sample Size		Gender	
N=300		Female	162 (54%)
		Male	138(46%)
Age Classes		**Occupation**	
13–18	1 (0.3%)	Student	92 (30.7%)
19–25	90 (30%)	Employed	186 (62.0%)
26–35	173 (57.7%)	Self-Employed	19 (6.3%)
36–45	18 (6%)	Out of work	2 (0.7%)
46–55	17 (5.7%)	Retired	1 (0.3%)
55–60	1 (0.3%)		
Educational Achievement		**Current Total Year's Income**	
High school graduate	42 (14%)	Less than 10.000 Euro	65 (21.7%)
Completed apprenticeship	26 (8.7%)	10.000-19.000 Euro	38 (12.7%)
Bachelor's degree	120 (40%)	20.000-29.000 Euro	34 (11.3%)
Master's degree	103 (34.3%)	30.000-39.000 Euro	39 (13%)
Doctorate Degree	7 (2.3%)	40.000-49.000 Euro	38 (12.7%)
Professional Degree	2 (0.7%)	50.000-59.000 Euro	35 (11.7%)
		60.000-69.000 Euro	31 (10.3%)
		70.000-79.000 Euro	12 (4%)
		80.000-89.000 Euro	4 (1.3%)
		90.000-99.000 Euro	1 (0.3%)
		100.000 Euro or more	3 (1%)

A number of 260 (86.7%) of participants use Facebook on a daily basis. Therein, 213 (71%) do follow at least one company's Facebook page. Of this group, 93 (31%) reported to have written a complaint on a Facebook page. These written complaints concerned a product (62), service (59) or the company in general (9). Four respondents chose the category "Other" and reported issues of other complaints they issued on Facebook (e.g., cleanliness, treatment of animals, model size, sound of TV channel).

When asked to evaluate on the perceived realism of the observed experimental situation, 259 (86.3%) reported that it would be likely to observe such a situation, 14 participants did not think that it is likely to observe such a situation and 7 were not sure.

A total number of 187 (62.3%) participants reported that they go on holidays 1–2 times per year, 85 (28.3%) go 2–4 times per year on holidays. Of all participants, 286 (95.3%) do search for travel information online, and 194 participants (64.7%) do think of posts to Facebook pages as a reliable word of mouth experience.

Table 3: Sample Characteristics

Facebook Usage	
Less than Once a Month	5 (1.7%)
Once a Month	1 (0.3%)
2–3 Times a Month	3 (1.0%)
Once a Week	7 (2.3%)
2–3 Times a Week	24 (8%)
Daily	260 (86.7%)

Following FB Company Pages		Has Written Complaint	
Yes	213 (71%)	Yes	93 (31%)
No	80 (26.7%)	No	207 (69%)
Don't know	7 (2.3%)		

Complaint was About (multiple answers possible)		"Other" Complaints
Service	59	Cleanliness
Product	62	Inappropriate treatment of animals
Company in general	9	Model too thin
Other	4	Sound was bad on TV channel

Realism Check		Holiday Behavior	
Yes	259 (86.3%)	0 times	9 (3%)
No	14 (4.7%)	1–2 times	187 (62.3%)
Don't know	27 (9%)	3–4 times	85 (28.3%)
		More than 4 times	19 (6.3%)

Online Search for Travel Information		FB Post is Reliable EWOM	
Yes	286 (95.3%)	Yes	194 (64.7%)
No	5 (1.7%)	No	97 (32.3%)
		Don't know	9 (3%)

4. Analysis

4.1 Scale Assessment

To determine the quality of construct measurements (Blacha, 2014) there are numerous (statistical) tests available that can verify if the main measurement criteria are met, namely, objectivity, reliability and validity (Theobald, 2003). Our study was carried out as a laboratory experiment under controlled conditions. Given its characteristics, objectivity can be assumed (Bortz & Döring, 2007, p. 195). Moreover, the data collection was free of interviewer bias, since it was executed online (Batinic, 2003, p.13).

We conducted an exploratory factor analysis (EFA) [1] on the reflective [2] 50 items (hypothesized as six constructs) with varimax rotation (Yoo, Donthu, & Lee, 2000). This was done to evaluate the factor structure of all original scales and to assess the unidimensionality of each construct as well as factorial and content validity. The factor analysis' output can be found in Appendix E (factor loadings below .399 are suppressed). Factor analysis is regarded as appropriate, since the Kaiser-Meyer-Olkin (KMO) measure of .827 confirms the sampling adequacy, which is above the minimum value of .50 (Field, 2013, p. 695) KMO values for the individual variables were assessed by examining the diagonal elements of the anti-image correlation matrix. These are all above .50, a figure which supports the suitability of the factor analysis (Field, 2013, p. 695).

As the factor extraction method, principal axis factoring was used, which is a popular estimation technique in EFA (Winter & Dodou, 2012). The number of factors to be extracted was determined by using Kaiser's criterion[3], according to which factors with an eigenvalue greater than 1 are retained (Field, 2013, p. 696). Contrary to our expectation of yielding six factors, factor analysis extracted eight distinct factors, which in combination explained 70.93% of the total variance, a figure that can be regarded as satisfactory (Hair, Black, Babin, Anderson, & Tatham, 2006, p. 128). A factor loading higher than .50 is required to assign a variable to a factor. The examination of the rotated factor matrix shows only one loading smaller than .50 (CHV_7), which also has a cross-loading (a variable has more than one

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[1] Prior to the EFA, the reverse coded items were decoded.

[2] Reflective items typically reflect the underlying construct (Ficher, Backhaus, Humme, Lohrberg, & Plinke, 2013)

[3] When the number of variables is between 20 and 50 (which is the case in our study), employing the eigenvalue for imposing a cut-off is most reliable.

significant loading). Cross-loadings should be lower than .40, which is not the case. That is why the Item (CHV_7) will be excluded from the analysis. In the rerun factor analysis excluding Item CHV_7, two other cross-loadings appeared (Credibility_3, Credibility_9); however, their loadings differ more than 0,2, therefore, discriminant validity of the EFA is not at risk. The other items do all load strongly on only one factor and therefore represent the constructs as intended.

As a next step, internal consistency reliability for all measures was calculated using Cronbach's alpha (α) (Cronbach, 1951). As a rule of thumb, an α above .70 is regarded as acceptable to ensure internal consistency reliability. All reflective measures used in this study exhibited good reliability of more than .80 and all data has corrected item-to-total correlations above the minimally required .30 (Field, 2013, p. 713; see Table 10). All content validity and reliability statistics can be found in Table 4 and Appendix F.

Table 4: Content Validity and Reliability Statistics (N=300)

Construct (No of Items)	EFA loadings	Cronbach's α	Corrected Item-to-total Correlation
Attitude (3)	.92, .91, .88	0,945	.89, .89, .87
Familiarity (3)	.78, .81, .75	0,839	.73, .70, .68
Skepticism (8)	.69, .68, .63, .74, .70, .70, .76, .63	0,886	.66, .64, .62, .68, .63, .64, .73, .63
Credibility (16)	.84, .87, .67, .6, .69, .83, .69, .87, .9, .84, .79, .89, .81, .75	0,966	.82, .84, .73, .63, .76, .81, .81, .69, .72, .86, .88, .83, .8, .87, .81, .72
CHV (11)	.89, .9, .79, .9, .85, .62, .89, .83, .84, .87	0,967	.89, .9, .85, .9, .88, .73, .52, .93, .86, .88, .88
CBR_trust (6)	.01, .87, .83, .84, .87, .87, .73, .76, .72	0,966	.86, .9, .88, .88, .9, .9
CBR_WOM (3)	.72, .76, .72	0,945	.87, .91, .88

The individual variables were then combined into a single composite measure and were averaged to create final constructs. Moreover, we created four grouping variables for the

manipulated variables. In summary, the measurement models are 'clean' with evidence of unidimensionality, reliability and validity.

4.2   Statistical Technique and Testing of Assumptions

Both multivariate analysis of variance (MANOVA) and analysis of variance (ANOVA) are particularly useful in analyzing experimental designs (Hair et al., 2006, p. 384). This study includes several dependent variables (skepticism, credibility, CHV, CBR). It therefore seemed appropriate to conduct a MANOVA instead of running various ANOVAs (Field, 2013, p. 624), as a MANOVA assesses mean differences on two or more dependent measures simultaneously (Bray & Maxwell, 1985, p. 8). MANOVA is able to control for the overall Type I error rate (usually .05) and can adjust for intercorrelations among dependent variables (Bray & Maxwell, 1985, pp. 9–11). If, as planned, covariates are included, the analysis is called a multivariate analysis of covariance (MANCOVA). The major purpose of including covariates is to reduce within-group error variance and eliminate possibly confounding structural effects (Field, 2013, p. 479).

Before conducting a MANCOVA, the researcher needs to check if the underlying assumptions are fulfilled to ensure that valid statistical results can be provided (see Eschweiler, Evanschitzky, & Woisetschläger, 2007, p.13, for an overview of all the assumptions pertaining to MANCOVA). First, to apply a MANCOVA, the dependent variables must be metric and the independent/moderating variable(s) (also known as factor(s) or treatment(s)) must be nonmetric (Hair et al., 2006, p. 383). Both these conditions are met in the present study because the dependent variables (CBR_trust, CBR_WOM) were measured on 5-point Likert scales and all moderating (credibility, CHV) was presented in the experiment as nonmetric. The premise of no multivariate outliers is tenable, as found outliers that appeared more than one time in the boxplots of the dependent measures were eliminated from the dataset (Field, 2013, p.177; the results of all assumption tests can be found in Appendix G). An overview of the resulting group sizes can be found in Appendix G. MANCOVA assumes independence of observations (Field 2013, p. 642). Our data adheres to this assumption because study respondents were randomly assigned to treatments and did not know other subjects' responses. Running five linear regressions assesses the assumption of no multicollinarity among dependent variables. No dependent variable approached a VIF value of greater than 5, indicating the absence of multicollinarity.

Another crucial assumption is multivariate normality (Field, 2013, p. 642). As it is not possible to check for it in SPSS, a pragmatic solution is to test the univariate normality for each dependent measure within each group (Field, 2013, p. 642.). This is assessed by means of the Shapiro-Wilk-Test (Shapiro, Wilk, & Chen, 1968), which reveals significant results ($p < .05$) for all four groups. As a consequence, the assumption of normality for these groups would have to be rejected. However, it is stated that MANCOVA (especially the F-test) is relatively robust to deviations from normality (Kellaris, Cox, & Cox, 1993; Lindman, 1974), pp. 31–33), particularly if groups are equally sized. Equality of groups is given when the ratio between the largest group (here $n = 80$) and the smallest group ($n = 66$) is less than 1.5 (ratio = 1.2) (Stevens, 1999, p. 76). Moreover, (Hays, 1974, p. 318), referring to the central limit theorem, argues that with cell sizes larger than $n = 30$, the normal distribution sufficiently models the empirical sampling distribution. Against this background, the premise of multivariate normality is regarded as fulfilled for our dependent measures.

Regarding the assumption of homogeneity of variance, it is recommended to first check if this criterion is met for the dependent variables individually (Hair et al., 2006, p. 432). For all dependent measures, preliminary analyses indicate that Levene's Test yielded non-significant results ($p > .05$), which indicates equality of error variances.

Since we intend to conduct a MANCOVA, additional assumptions regarding the covariates are to be examined (Hair et al., 2006, p. 407). An important premise is that covariates must be significantly correlated with dependent variables (Hair et al., 2006, p. 407). When examining Pearson bivariate correlations, it becomes evident that from the originally three potential covariates (brand attitude, brand familiarity, skepticism), none of the variables meet this condition ($p > .01$). Thus, no potential control variable qualified as an appropriate covariate and the main analysis is a MANOVA.

4.3   Manipulation and Realism Check

It is recommended that every experiment should incorporate manipulation checks to increase construct validity of the independent variables and experimental realism (Perdue & Summers, 1986). We intended to check whether credibility and CHV were perceived as being low or high, in line with our manipulation of the observed. The success of the manipulation was measured using a semantic differential 7-point Likert scale (credibility) and a 5-point Likert scale (CHV). Subjects were asked to indicate how they perceived the observed scenario. This measure showed significant difference between the two levels, which was revealed by an independent t-test[4] (low vs. high credibility; M_{low} = 3.1, SD_{low} = 1.1; M_{high} = 4.7, SD_{high} = 1.1; t (288.9) = -13.8; p=.00), (low vs. high CHV; M_{low} = 2.0, SD_{low} = 0.7; M_{high} = 3.9, SD_{high} = 0.7; t(288.4) = -22.5; p = .00), indicating a successful manipulation.

In studies with an experimental design, the fictive scenario should be as realistic as possible so that the experiment's findings can be transferred to existing problems in practice (Blacha, 2014, p. 180). To examine the realism of the scenario descriptions in the study, we integrated a small realism check into the questionnaire (*Is it possible that this situation actually occurs*?). The check resulted in 85% of the participants answering with 'Yes', 4.8% with 'I don't know' and 9.3% with 'No'. These numbers are considered a sufficient level of realism. (All tests can be found in Appendix H.)

4.4   Testing and Results of Hypotheses

In the following section, the results of the hypotheses testing are presented. Effects were assessed by MANOVA testing (for all hypotheses tests see Appendix I). Although there are four multivariate test statistics, namely, Pillai's trace Wilks' lambda, Hotelling's trace and Roy's largest root, only the results of Pallai's trace are reported in the following, unless they show diverging results in terms of significance. Pillai's trace is often recommended by other researchers (e.g., Field, 2013, p. 652) and is found to be the most robust by Olson (1979). Pillai's trace's robustness is suitable for this study, as our data contains mild violations of multivariate normality.

Table 5: Multivariate Analysis of Variance and Univariate Results

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[4] We did not perform an ANOVA for assessing the manipulation, since the assumption of homogeneity of variances was violated.

Sources	Multivariate Results				Univariate Results	
	Pillai's Trace	Effect size	F-Value	P-Value	CBR_trust	CBR_WOM
Main effect						
(H1) Degree of CHV	**0.252**	0.252	48.55	**0.00**	F = 94.433	F = 76.126
					P = 0.00	**P = 0.00**
Interaction Effects						
(H2a) CHV_high & Cred_low	0.030	0.030	2.195	0.115	F = 0.492 P = 0.484	F = 0.311 P = 0.578
(H3a) CHV_low & Cred_high	0.004	0.004	0.257	0.774	F = 0.510 P = 0.476	F = 0.241 P = 0.624
(H4) Skepticism low & Skepticism high	**0.023**	0.023	3.386	**0.035**	F = 6.741 **P = 0.010**	F = 4.601 **P = 0.023**

H1   If customers observe high/low CHV in Webcare intervening with NWOM, it influences the evaluation of CBR.

We first examine Hypothesis 1. To approach this hypothesis, we evaluate the relevant results of the MANOVA. The groups receiving a low and high treatment of CHV serve as the fixed factor, while both variables for CBR (trust, WOM) serve as the dependent variables. The multivariate tests reveal a significant main effect of CHV on CBR (Pallai's trace = .252; $F_{(2, 288)} = 48.5$; p = .00; partial eta squared (η) = 0.25). This outcome can be interpreted as follows: With a probability of 99.99 % the multivariate null hypothesis (there are no differences among any of the groups on any of the dependent variables) can be rejected. Thus, there are differences between groups of low and high degrees of CHV, when they are compared simultaneously to the mean evaluation of CBR. The multivariate effect size is estimated at .252, implying that 25.2 % of the variance in the dependent variables is accounted for by the degree (low/high) CHV.

Since the multivariate F-tests are significant, we next needed to reveal the source of the group differences and find out which of the two dependent variables (or possibly both) are affected by the independent variable. This can be investigated by follow-up analyses, either through a discriminant function analysis or through separate ANOVAs (Field, 2013, p. 644). We decided to pursue the latter alternative, which is the traditional approach (Field, 2013, p. 644). According to (Bock, 1985, p. 422–423), ANOVAs that are conducted after a significant MANOVA are 'protected' by the preliminary MANOVA. In other words, 'the overall

multivariate test protects against inflated Type 1 error rates because if that initial test is non-significant […] then the subsequent ANOVAs are ignored" (Field, 2013, p. 644). The follow-up univariate F-tests (see Table 5) reveal that the degree of CHV results in a significant impact on CBR_trust (F (1) = 94.433, p = .00, η = .246) and a significant impact on CBR_WOM (F (1) = 76.126, p = .00, η = .208). Therefore, the univariate null-hypothesis (all the group means are equal, that is, they come from the same population, (Hair et al., 2006, p. 393) can be rejected with a probability of 99.98 %. Therefore Hypothesis 1 is supported.

To able to test Hypothesis 1 in order to derive meaningful results for Hypothesis 2 and 3, we need further analysis to find out which groups among the factor CHV differ with regard to CBR. As we have a specified hypothesis that suggests an effect of CHV only in certain conditions, we make use of planned contrasts (Field, 2013, p. 455). The means in CBR of the two experimental groups (high and low CHV) can be compared to one another (Field, 2013, p. 883). Table 6 provides the contrast results.

Table 6: Simple Contrast Results (K-Matrix) CHV Groups

			CBR_trust	CBR_WOM
	Contrast Estimate		0.866	0.860
	Hypothesized Value		0	0
High CHV vs Low CHV	Difference (Estimate – Hypothesized)		0.866	0.860
	St. Error		0.089	0.099
	p-value		0.000	0.000
	95% Confidence Interval for Difference	Lower Bound	0.690	0.666
		Upper bound	1.041	1.054

H2   When CHV is high in Webcare, it results in a positive impact on CBR.

H3   If CHV is low in Webcare, it results in a negative impact on CBR.

The contrast reveals a significant difference (p = .00) in CBR (trust, WOM) between a high degree CHV and low degree of CHV. This finding is supported by the fact that the confidence interval does not cross zero, which allows us to assume that the confidence interval is one of the 95 out of 100 that comprises the true value of the difference (trust: between 0.690 and 1.041; WOM: between 0.666 and 1.054) (Field, 2013, p. 530). By examining the cell means (see Table 7) for CBR across both levels of CHV, it becomes evident that the group mean in

the high CHV condition is higher than in the low CHV condition. The evidence found for the main effect of CHV therefore further supports H2 and H3, where employment of CHV against the case of no CHV employment results in a more positive evaluation of CBR – and vice versa.

Table 7: CBR Means and Standard Deviation of Groups in H1 (H2, H3)

	Degree of CHV	
Dependent Variables	**Low**	**High**
CBR_trust	2.782 (0.795)	3.647 (0.722)
CBR_WOM	2.583 (0.861)	3.585 (0.821)

*H2a   If **CHV is high** in Webcare **and source credibility is low in NWOM**, it will have a positive impact on the evaluation of CBR.*

To test H2a, we examine the results of MANOVA. The two groups receiving a low credibility post and a high CHV answer as well as the group receiving a high credibility post and a high CHV answer (which serves as the control group) are the fixed factors. Again, both variables for CBR (trust, WOM) serve as the dependent variables. The multivariate tests reveal no significant differences between the two groups (Pallai's trace = 0.03; $F_{(2,143)} = 2.195$; $p = .115$; partial eta squared (η) = 0.03) (see Table 6). By looking at the cell means across both scenario groups, it is supported that both group means do not differ significantly when evaluating on CBR (see Table 8).   Therefore, there was no statistical evidence found to support Hypothesis 2a.

Table 8: CBR Means of Scenario Groups in H2a

	Scenarios	
Dependent Variables	**High CHV – Low Credibility**	**High CHV – High Credibility**
CBR_trust	3.685	3.601
CBR_WOM	3.550	3.626

*H3a   If **CHV is low** in Webcare **and source credibility is high in NWOM**, it will have a negative impact on the evaluation of CBR.*

To test H3a, we examine the results of MANOVA. The two groups receiving a high credibility post and a low CHV answer as well as the group receiving a low credibility post and a low CHV answer (which serves as the control group) are the fixed factors. Variables for CBR (trust, WOM) serve as the dependent variables. The multivariate tests reveal no significant differences between the two groups (Pallai's trace = 0.004; $F (2,142) = 0.257$; $p = .774$; partial eta squared (η) = 0.004) (see Table 6). By examining the cell means across both scenario groups, it is supported that both group means do not differ significantly when evaluating on CBR (see Table 9). Therefore, there was no statistical evidence found to support Hypothesis 3a.

Table 9: CBR Means of Scenario Groups in H3a

	Scenarios	
Dependent Variables	**Low CHV – Low Credibility**	**Low CHV – High Credibility**
CBR_trust	2.833	2.738
CBR_WOM	2.763	2.692

H4   People who are skeptical toward corporate communication will evaluate on average more negatively on CBR than people who are less skeptical.

To test H4, first we examine the results of an exploration of the collected data. The set is split into two cases: (1) people who evaluated on average higher than a score of 3.5 on the scale of skepticism are considered "not skeptical" and (2) people who evaluated under a mean score of 3.5 are considered "skeptical". A MANOVA testing with the fixed factor of the former described groups and dependent variables of CBR reveals a statistical significant difference between the two groups (Pallai's trace = 0.023; $F (2,288) = 3.386$; $p = .035$; partial eta squared (η) = 0.023) (see Table 5). This outcome can be interpreted as follows: With a probability of 99.99 % the multivariate null hypothesis (there are no differences among any of the groups on any of the dependent variables) can be rejected. Thus, differences between groups of low and high skepticism exist when they are compared simultaneously to the mean evaluation of CBR. The multivariate effect size is estimated at .023, implying that 2.3% of the variance in the dependent variables is accounted for by the degree of (low/high) skepticism. Since the multivariate F-tests are significant, we next needed to reveal the source of the group differences and find out which of the two dependent variables (or possibly both) were affected by the independent variable. This is investigated by a follow-up analysis, through a separate

ANOVA (Field, 2013, p. 644). The univariate F-tests (see Table 5) reveal that the degree of skepticism results in a significant impact on both CBR_trust ($F (1) = 6.741$; $p = .010$, $\eta = .023$) and CBR_WOM ($F (1) = 5.242$, $p = .023$, $\eta = .018$). Therefore, the univariate null-hypothesis (all the group means are equal, that is, they come from the same population, (Hair et al., 2006, p. 393) can be rejected with a probability of 99.98 %.

To be able to test H4, we need further analysis to find out which groups among the factor skepticism differ with regard to CBR. To do so, we make use of planned contrasts (Field, 2013, p. 455). The means in CBR of the two groups (high and low skepticism) can be compared to one another (Field, 2013, p. 883). Table 10 provides the contrast results.

Table 10: Simple Contrast Results (K-Matrix) Skepticism Groups

			CBR_trust	CBR_WOM
Not Skeptical vs Skeptical	Contrast Estimate		-0.291	-0.277
	Hypothesized Value		0	0
	Difference (Estimate – Hypothesized)		-0.291	-0.277
	St. Error		0.112	0.112
	p-value		0.010	0.023
	95% Confidence Interval for Difference	Lower Bound	-0.511	-0.516
		Upper bound	-0.070	-0.390

The contrast reveals a significant difference ($p = .010$, 0.023) in CBR (trust, WOM) between the groups 'not skeptical' and 'skeptical'. This finding is supported by the fact that the confidence interval does not cross zero, which allows us to assume that the confidence interval is one of the 95 out of 100 that comprises the true value of the difference (trust: between -0.511 and -0.070; WOM: between -0.516 and -0.390) (Field, 2013, p. 530). By examining the cell means (see Table 11) for CBR across both levels of skepticism, it becomes evident that the group mean in the skeptical condition is lower than in the not skeptical condition (and vice versa). Therefore H4 is supported.

Table 11: CBR Means and Standard Deviation of Scenario Groups in H4

	Scenarios	
Dependent Variables	**Skeptical**	**Not Skeptical**
CBR_trust	3.132 (0.60)	3.423 (0.094)
CBR_WOM	3.076 (0.065)	3.353 (0.102)

5. Conclusion and Discussion

5.1 Summary

What is the effect of conversational human voice in Webcare if an observing customer is exposed to negative word of mouth?

Fuelled by the emergence, fast evolvement and maturation of social networking sites, communication on SNS for companies has become a necessity in their customer dialogue. The existence of dialogical communication capabilities facilitates the exchange and display of opinions and experiences with brands, especially with their products and services.

From the companies' point of view, which constantly face the challenge of ensuring that their brands are perceived as intended, the growing usage of social networking sites as a feedback platform is a source of concern. They fear that the amount of negative feedback that is addressed could erode brand perceptions due to inconsistencies in traditional corporate product and service presentations and a perception created by consumers' negative displays in social networks. So far, studies have not yet examined whether these concerns are justified in the context of SNS. This research gap provided a starting point for us to shed light on these concerns and formulate our research aim of investigating whether the degree of conversational human voice in communicating, as a company, in social networks affects customer-based reputation while considering possible moderator effects of credibility of a negative post and general skepticism toward corporate communication.

We derived our conceptual framework based on a combination of theoretical findings regarding Webcare and brand perceptions. We then conducted a quantitative online survey, which yielded 300 usable responses. Given the experimental design of our study and the consideration of multiple dependent variables, multivariate and univariate analysis of variance functioned as suitable statistical techniques to test our four hypotheses. The results of our study suggest that the condition of employment of CHV in an answer to an NWOM post results in a positive impact on CBR evaluation. We did not find evidence for the moderating effects of the interplay between levels of credibility of a negative post and the level of employed CHV in the answer. In addition to this, consumer skepticism towards corporate communication mediated CBR evaluation, but nonetheless did skeptical consumers evaluate more positive on CBR when being confronted with CHV.

5.2 Discussion of Results

H1   If customers observe high/low CHV in Webcare intervening with NWOM, it influences the evaluation of CBR.

Recalling the argumentation for H1, we posited that CHV in corporate communication on SNS has an effect on CBR evaluation of observing consumers. This hypothesis is supported by our findings: If CHV is employed; it has a main effect on CBR evaluation. The direction (positive/negative) of the effect was further specified in H2 and H3:

H2   When CHV is high in Webcare, it results in a positive impact on CBR.

H3   If CHV is low in Webcare, it results in a negative impact on CBR.

The evidence found for the main effect of CHV further supports H2 and H3, where employment of CHV against the case of no CHV employment results in a positive evaluation of CBR – and vice versa. Therefore, our study has proven, that CHV employment in corporate communication on SNS is of value in order to intervene in NWOM and additionally mediate the impact of NWOM on observing consumers.

H2a   If CHV is high in Webcare and source credibility is low in NWOM, it will have a positive impact on the evaluation of CBR.

H3a   If CHV is low in Webcare and source credibility is high in NWOM, it will have a negative impact on the evaluation of CBR.

The hypothesized interaction effects of high or low credibility posts to Facebook pages combined with an answer either low or high in CHV were not supported. An explanation for this could be that our study does not provide any information on issue-solving, which might be a measurement of an underlying factor that would have contributed to the complexity of our scenarios. Our argument for credibility of a negative post may apply in particular, if a dialogical conversation would have gone into a further dimension of a reply to an answer (and so on), to evaluate the final outcome of a conversation on SNS. However, in our study, we did not provide any information on such situation outcomes.

In addition these findings could support, that NWOM source credibility on SNS does not represent a central cue for observing consumers when evaluating on CBR, but the organizations' answer to such NWOM is the ultimate cue of building an attitude. Therefore it

is underlined, that CHV is a critical communicational construct in order to mediate the impact of NWOM.

H4   People who are skeptical toward corporate communication will evaluate on average more negatively on CBR than people who are less skeptical.

The hypothesized effect of consumer skepticism was supported in the results. Consumer skepticism seems to moderate the evaluation of CBR, namely, people who are more skeptical toward corporate communication evaluated, on average, lower on CBR with no regard to the scenario to which they were appointed. This outcome might explain a certain general attitude that an observing consumer holds against observed corporate-induced communication.

However, in the examined scenarios, skepticism could not be accounted for as a critical covariate; therefore, it is assumed that even though participants in this experiment hold, on average, a more skeptical view toward corporate communication of any kind, the answers that organizations can give on SNS with the employment of CHV still enforce a more positive evaluation of CBR. Therefore, it can be assumed that concepts employing CHV can be used as a general technique that organizations can follow when communicating on SNS, as its effect is not restricted with regard to attitudes that observing people hold. It does not have to be adjusted to a certain audience. In combination with the non-significant interaction effects of levels in credibility and CHV, it can be supposed that communicational concepts employing CHV do positively influence an audience, even without regard to the type of negative feedback an organization is facing. These findings underline the generalizability of the employment of CHV in communication on SNS to a beneficial use.

Summarizing, in order to answer our research question of "*What is the effect of conversational human voice in Webcare if an observing customer is exposed to negative word of mouth?*" it can be said clearly: The employment of CHV in Webcare is of crucial importance in order to mediate NWOM, and has the effect of positively influencing an observing audience on SNS in their evaluation of CBR. The hypothesized moderators credibility and skepticism, testing both negative as such, seem to have underlined the generalizability of its deployment.

5.3   Theoretical Contribution and Managerial Implications

The present thesis provides several theoretical contributions. To begin with, it represents the first case of empirical research into the relationship between the employment of CHV in

Webcare on SNS and consumers' respective CBR perceptions. It therefore goes some way to filling a gap in literature. More precisely, it contributes to an understanding of this concept in the B2C-environment in general as well as to the knowledge of its application in corporate communication in particular. Second, the thesis contributes to the Webcare literature through the identification of CHV as a critical part of Webcare concepts of companies' SNS. Third, our thesis combines theoretical insights from three research fields that have not been examined in conjunction with each other before, namely CHV, credibility and consumer skepticism. The sparse literature on concepts of Webcare is thus extended with regard to influences on CBR of these fields. As a result, we were able to define the influence of CHV more holistically.

Furthermore, as an abstract dimension, the impact of such scenarios on observing customers is considered in this research, whereas existing research focuses on the single cases in direct interaction between customer and company. Therefore, a passive consumer is examined, which allows us to expand the results of this evaluation to an even wider group of consumers, compared to a single scenario case involving only the dialogical participant.

Recalling the theoretical background of corporate reputation, and therein the concept of customer-based reputation, our study has examined two dimensions of CBR, namely the factors trust and word-of-mouth. Both dimensions do not require a direct involvement with a company in order to judge on reputation. Therefore we studied the influence of NWOM on observers, which is a substantial higher number of people compared to only the ones posting NWOM on SNS. In this context, we provided an unusual point of view, which has not been used before in reputation literature in this context.

Moreover, the dimension of word of mouth which was queried in our CBR evaluation gives an unusual opportunity to assume the following: According to the study of East et al., (2008) PWOM has a greater impact on brand choice than NWOM. Participants of our study, when facing CHV in Webcare indicated positively when evaluating on the scales of word of mouth in CBR. Therefore it can be assumed, that an observed NWOM can be resolved in a PWOM for the observing potential customer. This provides a new link between CBR and electronic word of mouth research and extends existing literature.

As suggested by Laczniak, DeCarlo, & Ramaswami, (2001) we took mediating effects of causal attributions of NWOM observers into account, namely skepticism and credibility. As we could not find such mediating effect, this contributes to the field of NWOM research.

As the study incorporates a sufficient level of realism (see section 4.1), we can transfer the experiment's findings to practice and point out several managerial implications.

Brand image is a particularly important strategic factor for companies that offer branded products and services, as it may affect a company's profits (Yoo & Gretzel, 2008) consumer's subsequent buying behavior (Dobni & Zinkhan, 1990) and brand loyalty (Yoon et al., 1993). Given this importance of brand image, companies should consider the negative effect of the absence of a Webcare concept, specifically the absence of CHV in communicating on SNS in the business-to-consumer environment.

The results should be of particular interest for the group of marketing and communication managers. While these can hardly directly control consumer interactions, there may be direct and indirect ways of intervening and therefore positively mediate negative feedback on SNS. Considering the evidence that the absence of CHV dilutes customer-based reputation, managers should advocate the formation of social media communication teams, and employ CHV in their Webcare communication concepts. This would reduce the impact that negative feedback on SNS may have on customer-based reputation, and in turn may increase brand loyalty and, most importantly, not only mirror a positive image toward observing customers, but also provide real problem-solving capabilities via SNS for actual customers.

Due to the non-significant results regarding the proposed moderators of skepticism and credibility with regard to possibly mediating such impact of CHV, Webcare concepts cannot be identified. However, this outcome underlines the simplicity of this researches' claim, namely that CHV is not a concept to choose in Webcare, but an urgent necessity for companies to employ to meet the dialogical needs of customers.

5.4   Limitations and Further Research

Although it contributes to academic research and practice, the present investigation has limitations that point to avenues for further research.

Foremost, our number of respondents points to a mediocre number, in order to derive further meaningful insights in Webcare on SNS a higher number of respondents would be of great value to develop stronger recommendations.

Our study is restricted to the investigation of the effects of the degree of CHV employed in one answer to negative feedback on SNS. Given the dialogical nature of such induced

feedback, it is probable that the conversation does not end at the point of one single answer. It is likely that the consumer answers back, especially if asked for, and another reply of the involved company is sought. Therefore, such dialogues should be further examined with regard to their outcome, if the company in this specific case could actually solve the customers' negative feedback on an issue. This would not only display a company's problem-solving capabilities through SNS but also there might be an actual change of attitude observable during such multi-layered conversations.

Another limitation of this study is the restriction to one issue example (lost luggage) in a certain context (information search about an airline). It is probable that there are issues that one can have with a product or service and that have a higher or lower impact on an observer's evaluation of the severity of a scenario. A replication of this study could integrate several issues and distinguish between product/service dimensions as well as dimensions of severity of an issue.

Furthermore, skepticism is only one dimension that is examined as means of a general attitude toward corporate communication. Further research could be conducted to examine attitude formation and other specific features of an observing customer that could serve as a moderator when evaluating on CBR, for example, intelligence, emotional distress or other processing capabilities.

Overall, our findings suggest that the employment of CHV is purely beneficial to an organization when aiming to positively influence CBR of a wide audience in SNS. However, the various starting points for further research discussed above confirm that our investigation only constitutes a first step in examining this issue. Thus, the dialogue between consumers and companies in SNS remains an interesting topic that is worthy of more analysis that aims to gain a dynamic understanding of the opportunities and threats of communication in SNS.

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Appendices

Appendix A: Study Questionnaire (Screenshots)

First Page

Brand awareness

Scales Brand attitude & Brand familiarity

UNIVERSITY OF TWENTE.

On the scales below, please indicate your feelings. Numbers '1' and '7' indicate a very strong feeling, Numbers '2' and '6' indicate a strong feeling, Numbers '3' and '5' indicate a fairly weak feeling. Number '4' indicates that you are undecided.

How would you assess the brand KLM in general?

	1	2	3	4	5	6	7	
bad	○	○	○	○	○	○	○	good
unpleasant	○	○	○	○	○	○	○	pleasant
unfavourable	○	○	○	○	○	○	○	favourable

The brand KLM to me is

unfamiliar	○ ○ ○ ○ ○ ○ ○	familiar

About the brand KLM

I know nothing	○ ○ ○ ○ ○ ○ ○	I know a lot

With the brand KLM I am

inexperienced	○ ○ ○ ○ ○ ○ ○	experienced

Survey Completion

0% ▮▮▮▮▮▮▮▮▮▮ 100%

>>

Experimental Situation

Please put yourself in the following situation:

You have just booked a holiday (a full package - flights, transportation and hotel).

You see that you are flying with KLM - and in order to get more information about the airline before your holiday, you have reached their Facebook Company Page.

Survey Completion
0% ■■■ 100%

>>

Scales Skepticism

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Various companies use social media channels such as Facebook as an information source for their customers, alongside the traditional range of on- and offline media.

In general, how would you assess any **Communication provided by Companies**? (In both traditional and social media)

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I can depend on getting the truth in most Corporate Communication	○	○	○	○	○
Corporate Communication's aim is to inform the consumer	○	○	○	○	○
I believe Corporate Communication is informative	○	○	○	○	○
Corporate Communication is generally truthful	○	○	○	○	○
Corporate Communication is a reliable source of information about the quality and performance of products	○	○	○	○	○
Corporate Communication is truth well told	○	○	○	○	○
I feel I've been accurately informed after reading most Corporate Communication	○	○	○	○	○
Most Corporate Communication provides consumers with essential information	○	○	○	○	○

Survey Completion
0% ▮▮▮▮ 100%

[>>]

49

Low Credibility Post

Timing
These page timer metrics will not be displayed to the recipient.
First Click: *0 seconds.*
Last Click: *0 seconds.*
Page Submit: *0 seconds.*
Click Count: *0 clicks.*

Facebook offers users the opportunity to publicly post comments about any topic to a page. Many users take that opportunity to leave reviews of service or product related experiences.

In line with your information search, **you read a recent customer post to the page of KLM**.

Please read the following post carefully:

Jamie Williams ▸ **KLM**
2 mins · 🌐

WTF KLM!!!! Lost luggage in my holiday, no compensation YOU'RE CUSTMER SERVICE IS ABSOLUTELY PATHETIC!!!!!!! I would not go on holidays ever again with u.

Like · Comment · Share

Survey Completion
0% ▮▮▮▮▮ 100%

>>

High Credibility post

UNIVERSITY OF TWENTE.

Timing

These page timer metrics will not be displayed to the recipient.

First Click: *0 seconds.*

Last Click: *0 seconds.*

Page Submit: *0 seconds.*

Click Count: *0 clicks.*

Facebook offers users the opportunity to publicly post comments about any topic to a page. Many users take that opportunity to leave reviews of service or product related experiences.

In line with your information search, **you read a recent customer post to the page of KLM.**

Please read the following post carefully:

Jamie Williams ▸ **KLM**
2 mins · 🌐

Dear KLM Team, I have to admit that I always had a great customer experience with your airline, but recent events tell me otherwise. You lost my baggage over my holiday flight, offered no compensation whatsoever, and it took 6 (!) days to have part of it delivered to me. Now, after 4 weeks I still haven't received anything regarding compensation for the uncomfortable first week of my holiday, let alone one bag is still missing.

Like · Comment · Share

Survey Completion
0% ▮▮▮▮ 100%

>>

Scales Credibility

UNIVERSITY OF TWENTE.

On the scales below, please indicate your feelings. Numbers '1' and '7' indicate a very strong feeling, Numbers '2' and '6' indicate a strong feeling, Numbers '3' and '5' indicate a fairly weak feeling. Number '4' indicates that you are undecided.

On the scales below, indicate your feelings about the author of this post.

	1	2	3	4	5	6	7	
Intelligent	○	○	○	○	○	○	○	Unintelligent
Trained	○	○	○	○	○	○	○	Untrained
Cares about me	○	○	○	○	○	○	○	Doesn't care about me
Honest	○	○	○	○	○	○	○	Dishonest
Has my interest at heart	○	○	○	○	○	○	○	Doesn't have my interest at heart
Trustworthy	○	○	○	○	○	○	○	Untrustworthy
Expert	○	○	○	○	○	○	○	Inexpert
Not Self-Centered	○	○	○	○	○	○	○	Self-centered
Concerned with me	○	○	○	○	○	○	○	Not concerned with me
Honorable	○	○	○	○	○	○	○	Dishonorable
Competent	○	○	○	○	○	○	○	Incompentent
Ethical	○	○	○	○	○	○	○	Unethical
Sensitive	○	○	○	○	○	○	○	Insensitive
Bright	○	○	○	○	○	○	○	Stupid
Genuine	○	○	○	○	○	○	○	Phony
Understanding	○	○	○	○	○	○	○	Not Understanding
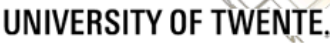
Survey Completion

0% ▮▮▮▮▮▮ 100%

>>

High CHV post

UNIVERSITY OF TWENTE.

Timing
These page timer metrics will not be displayed to the recipient.
First Click: *0 seconds.*
Last Click: *0 seconds.*
Page Submit: *0 seconds.*
Click Count: *0 clicks.*

Facebook not only offers users the opportunity to post publicly to a company's page, but also offers the company concerned to reply to such comments.

Next, you see that **KLM has responded to this post**.

You see the following answer. Please read carefully.

KLM ✔ Dear Jamie, thank you for your honest report of this issue. I am very sorry to hear that you had these inconveniences with our customer service desk! If you send me your booking number, I will be happy to look into your case personally and get back to you with a solution! :) Best regards /Lisa
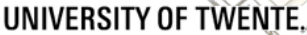
Like · Reply · Just now

Survey Completion
0% ████████ 100%

>>

Low CHV post

UNIVERSITY OF TWENTE.

Timing
These page timer metrics will not be displayed to the recipient.
First Click: *0 seconds.*
Last Click: *0 seconds.*
Page Submit: *0 seconds.*
Click Count: *0 clicks.*

Facebook not only offers users the opportunity to post publicly to a company's page, but also offers the company concerned to reply to such comments.

Next, you see that **KLM has responded to this post**.

You see the following answer. Please read carefully.

KLM ✓ For this issue, please contact our Customer Service Centre at http://klmf.ly/3ndz22h
Like · Reply · Just now

Survey Completion
0% ████████   100%

>>

Scales – CHV

UNIVERSITY OF TWENTE.

Please indicate your thoughts about the answer that KLM provides. The company...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Invites conversation	○	○	○	○	○
Is open to dialog	○	○	○	○	○
Uses a conversational style of communicating	○	○	○	○	○
Is attempting to communicate in a human way	○	○	○	○	○
Is trying to be interesting in its communication	○	○	○	○	○
Uses humor in communicating	○	○	○	○	○
Provides links to competitors	○	○	○	○	○
Is trying to make communication enjoyable	○	○	○	○	○
Would admit an error	○	○	○	○	○
Gives instant feedback and discusses criticism in a direct but non-critical way	○	○	○	○	○
Treats me and others as a person	○	○	○	○	○

Survey Completion

0% ▮▮▮▮▮ 100%

>>

55

Scales - CBR trust

UNIVERSITY OF TWENTE.

Please evaluate **based on the conversation you have observed** on the company KLM in general:

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
This company can generally be trusted	○	○	○	○	○
I trust this company	○	○	○	○	○
I have great confidence in this company	○	○	○	○	○
This company has high Integrity	○	○	○	○	○
I can depend on this company to do the right thing	○	○	○	○	○
This company can be relied upon	○	○	○	○	○

Survey Completion
0% ▮▮▮▮▮▮ 100%

`>>`

Scales - CBR WOM

UNIVERSITY OF TWENTE.

Please evaluate **based on the conversation you have observed**: When I talk about KLM in the future...

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
...I'm likely to say good things about this company	○	○	○	○	○
...I would recommend this company to my friends and relatives	○	○	○	○	○
...if my friends were looking for a new company of this type, I would tell them to try KLM	○	○	○	○	○

Survey Completion
0% ▮▮▮▮▮▮ 100%

`>>`

Realism Check

UNIVERSITY OF TWENTE.

It is possible that this situation, that you are observing a conversation similar to the posts displayed before, actually occurs?

○ Yes
○ No
○ Don't know

Survey Completion
0% ▮▮▮▮▮▮ 100%

`>>`

Survey Powered By Qualtrics

Medium Usage & Complaint Behavior

UNIVERSITY OF TWENTE.

How often do you use Facebook?
- ○ Less than Once a Month
- ○ Once a Month
- ○ 2-3 Times a Month
- ○ Once a Week
- ○ 2-3 Times a Week
- ○ Daily

Are you following any Facebook pages concerning a company that offers products or services (or both)?
- ○ Yes
- ○ No
- ○ Don't know

Have you ever written a complaint to an Organisations' Facebook page?
- ○ Yes
- ○ No

Survey Completion
0% ■■■■■■ 100%

>>

UNIVERSITY OF TWENTE.

What was this complaint about? You can choose multiple Answers.
- ☐ Service
- ☐ Product
- ☐ Company in general
- ☐ Other
  [   ]
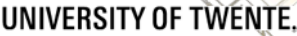
Survey Completion
0% ■■■■■ 100%

>>

Travel behavior

UNIVERSITY OF TWENTE.

How often do you go on holidays per year?
- ○ 0 times
- ○ 1-2 times
- ○ 3-4 times
- ○ More than 4 times
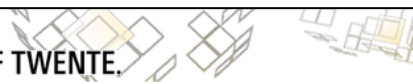
Survey Completion
0% ▮▮▮▮▮▮▮ 100%

>>

UNIVERSITY OF TWENTE.

Do you search for travel information online?
- ○ Yes
- ○ No
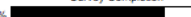
Electronic word-of-mouth is a statement concerning products, services or a company that consumers share via the internet, without being rewarded for it.

Would you consider posts to Facebook Pages a reliable word-of-mouth experience?
- ○ Yes
- ○ No
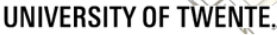
Survey Completion
0% ▮▮▮▮▮▮▮ 100%

>>

Demographics

UNIVERSITY OF TWENTE.

What is your gender?
- ○ Male
- ○ Female

How old are you?
[▾]

What is the highest degree or level of school you have completed? *If currently enrolled, highest degree received.*
- ○ No schooling completed
- ○ High school graduate, diploma or equivalent
- ○ Completed apprenticeship
- ○ Bachelor's degree
- ○ Master's degree
- ○ Doctorate Degree
- ○ Professional Degree

What is your current employment status?
- ○ Student
- ○ Employed
- ○ Self-Employed
- ○ Out of work
- ○ Retired
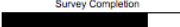
What is your current estimated total years' income?
[▾]

Survey Completion
0% ▮▮▮▮▮▮▮▮ 100%

>>

Lottery

UNIVERSITY OF TWENTE.

Do you want to participate in the lottery to win an Amazon Gift certificate of 50 Euro?
- ○ Yes, please.
- ○ No thank you

Survey Completion
0% ▮▮▮▮▮▮ 100%

>>

Survey Powered By Qualtrics

Last Page
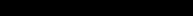
Appendix B: Overview of employed Scales

	Construct	Items	Scale	Source
Control Variables	Brand awareness	Do you know the brand X? • Yes • No		(Pappu et al., 2005)
	Brand Familiarity	• familiar — unfamiliar • inexperienced — experienced • knowledgeable — not knowledgeable		(Kent & Allen, 1994)
	Brand attitude	• good — bad • pleasant — unpleasant • favorable — unfavorable		(MacKenzie & Lutz, 1989)
	CHV perception	1. Invites conversation 2. Is open to dialogue 3. Uses a conversational style of communicating 4. Attempting to communicate in a human way 5. Trying to be interesting in its communication 6. Uses humor in communicating 7. Provides links to competitors 8. Trying to make communication enjoyable 9. Would admit an error 10. Giving instant feedback and discusses criticism in a direct but non-critical way 11. Treat me and others as a person	5-Point Likert Scale	Adapted from (Kelleher, 2009)
	Consumer Skepticism (CC=Corporate Communication)	1. We can depend on getting the truth in most CC. 2. CC's aim is to inform the consumer. 3. I believe CC is informative. 4. CC is generally truthful. 5. CC is a reliable source of information about the quality and performance of products. 6. CC is truth well told. 7. *(In general, CC presents a true picture of the product being advertised)*[5] 8. I feel I've been accurately informed after reading most CC. 9. Most CC provides consumers with essential information.	5-Point Likert Scale	Adapted from (Obermiller & Spangenberg, 1998)

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[5] Because we are examining a specialized case of the combination of product/service, this Item will not be displayed

	Construct	Items	Scale	Source
	Customer Based Reputation	*Factor: customer satisfaction* [6] • *I am satisfied with the services the company provides to me* • *I am satisfied with my overall experience with this company* • *As a whole, I am NOT satisfied with this company* *Factor: loyalty* • *I am a loyal customer of this company* • *I have developed a good relationship with this company* • *I am loyal to this company* Factor: trust • This company can generally be trusted • I trust this company • I have great confidence in this company • This company has high Integrity • I can depend on this company to do the right thing • This company can be relied upon Factor: word of mouth • I'm likely to say good things about this company • I would recommend this company to my friends and relatives • If my friends were looking for a new company of this type, I would tell them to try this place	5-Point Likert Scale	Adapted from (Walsh & Beatty, 2007)

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[6] Customer Satisfaction and loyalty will not be queried, as the experiment does not require participants to be or have been a customer of KLM

Appendix C: SPSS Output Sample Demographics

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	138	46,0	46,0	46,0
	Female	162	54,0	54,0	100,0
	Total	300	100,0	100,0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13-18	1	,3	,3	,3
	19-25	90	30,0	30,0	30,3
	26-35	173	57,7	57,7	88,0
	36-45	18	6,0	6,0	94,0
	46-55	17	5,7	5,7	99,7
	55-60	1	,3	,3	100,0
	Total	300	100,0	100,0	

Employment Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	92	30,7	30,7	30,7
	Employed	186	62,0	62,0	92,7
	Self-Employed	19	6,3	6,3	99,0
	Out of work	2	,7	,7	99,7
	Retired	1	,3	,3	100,0
	Total	300	100,0	100,0	

Educational Achievement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High school graduate, diploma or equivalent	42	14,0	14,0	14,0
	Completed apprenticeship	26	8,7	8,7	22,7
	Bachelor?s degree	120	40,0	40,0	62,7
	Master's degree	103	34,3	34,3	97,0
	Doctorate Degree	7	2,3	2,3	99,3
	Professional Degree	2	,7	,7	100,0
	Total	300	100,0	100,0	

Total years' income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 10.000 Euro	65	21,7	21,7	21,7
	10.000-19.000 Euro	38	12,7	12,7	34,3
	20.000-29.000 Euro	34	11,3	11,3	45,7
	30.000-39.000 Euro	39	13,0	13,0	58,7
	40.000-49.000 Euro	38	12,7	12,7	71,3
	50.000-59.000 Euro	35	11,7	11,7	83,0
	60.000-69.000 Euro	31	10,3	10,3	93,3

70.000-79.000 Euro	12	4,0	4,0	97,3
80.000-89.000 Euro	4	1,3	1,3	98,7
90.000-99.000 Euro	1	,3	,3	99,0
100.000 Euro or more	3	1,0	1,0	100,0
Total	300	100,0	100,0	

Appendix D: SPSS Output Sample Characteristics

Facebook Usage

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than Once a Month	5	1,7	1,7	1,7
	Once a Month	1	,3	,3	2,0
	2-3 Times a Month	3	1,0	1,0	3,0
	Once a Week	7	2,3	2,3	5,3
	2-3 Times a Week	24	8,0	8,0	13,3
	Daily	260	86,7	86,7	100,0
	Total	300	100,0	100,0	

FB Pages following

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	213	71,0	71,0	71,0
	No	80	26,7	26,7	97,7
	Don't know	7	2,3	2,3	100,0
	Total	300	100,0	100,0	

Has written complaint

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	93	31,0	31,0	31,0
	No	207	69,0	69,0	100,0
	Total	300	100,0	100,0	

What was complaint about

		Service	Product	Company in general	TEXT
N	Valid	59	62	9	4
	Missing	241	238	291	296

"Other" complaints

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		296	98,7	98,7	98,7
	Cleanliness	1	,3	,3	99,0
	Inappropriate treatment of animals	1	,3	,3	99,3
	model too thin	1	,3	,3	99,7
	sounds was bad on TV channel	1	,3	,3	100,0
	Total	300	100,0	100,0	

Realism Check

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	259	86,3	86,3	86,3
	No	14	4,7	4,7	91,0
	Don't know	27	9,0	9,0	100,0
	Total	300	100,0	100,0	

Holiday behavior

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-2 times	187	62,3	62,3	62,3
	0 times	9	3,0	3,0	65,3
	3-4 times	85	28,3	28,3	93,7
	More than 4 times	19	6,3	6,3	100,0

	Total	300	100,0	100,0	

Online Search for travel information

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	286	95,3	98,3	98,3
	No	5	1,7	1,7	100,0
	Total	291	97,0	100,0	
Missing	System	9	3,0		
Total		300	100,0		

FB Post is reliable EWOM

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	194	64,7	66,7	66,7
	No	97	32,3	33,3	100,0
	Total	291	97,0	100,0	
Missing	System	9	3,0		
Total		300	100,0		

Appendix E: Results of Component & Factor Analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,902
Bartlett's Test of Sphericity	Approx. Chi-Square	10286,595
	df	1225
	Sig.	,000

Scree Plot
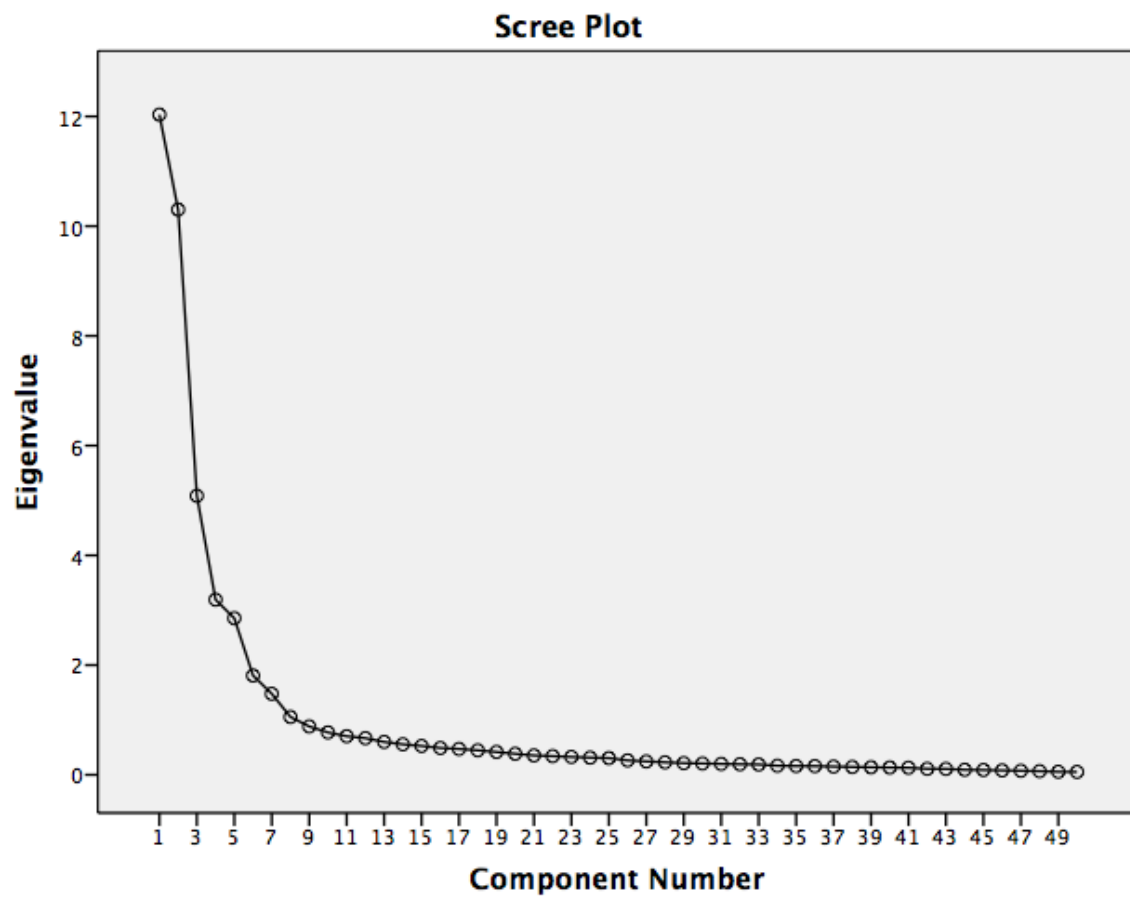
Total Variance Explained (Component Analysis)

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12,033	24,065	24,065	12,033	24,065	24,065	10,161	20,322	20,322
2	10,302	20,604	44,669	10,302	20,604	44,669	7,989	15,978	36,300
3	5,085	10,171	54,840	5,085	10,171	54,840	7,140	14,280	50,581
4	3,192	6,384	61,224	3,192	6,384	61,224	4,425	8,850	59,430
5	2,854	5,708	66,932	2,854	5,708	66,932	2,877	5,754	65,185
6	1,809	3,619	70,551	1,809	3,619	70,551	2,325	4,649	69,834
7	1,477	2,954	73,505	1,477	2,954	73,505	1,620	3,241	73,075
8	1,055	2,109	75,614	1,055	2,109	75,614	1,270	2,540	75,614
9	,882	1,764	77,378						
10	,773	1,545	78,924						
11	,704	1,407	80,331						
12	,668	1,336	81,666						
13	,600	1,200	82,866						
14	,556	1,112	83,978						
15	,526	1,052	85,030						
16	,489	,978	86,008						
17	,472	,943	86,951						
18	,446	,893	87,844						
19	,416	,833	88,677						
20	,383	,767	89,444						
21	,353	,707	90,151						
22	,341	,681	90,832						
23	,326	,652	91,484						
24	,313	,626	92,110						
25	,305	,610	92,719						
26	,263	,526	93,246						
27	,244	,488	93,734						
28	,229	,458	94,191						
29	,213	,426	94,617						
30	,207	,413	95,030						
31	,199	,397	95,428						
32	,193	,386	95,814						
33	,188	,377	96,191						
34	,166	,332	96,523						
35	,161	,321	96,844						
36	,159	,318	97,162						
37	,150	,300	97,463						
38	,143	,286	97,748						
39	,137	,275	98,023						
40	,133	,266	98,289						
41	,129	,258	98,547						
42	,110	,219	98,767						
43	,108	,216	98,983						
44	,092	,185	99,167						
45	,088	,176	99,344						
46	,080	,160	99,503						
47	,073	,147	99,650						
48	,066	,133	99,782						
49	,056	,112	99,894						
50	,053	,106	100,000						

Extraction Method: Principal Component Analysis.

Rotated Factor Matrix (Factor Analysis)

Rotated Factor Matrix^a

	Factor							
	1	2	3	4	5	6	7	8
Brand_attitude_1					,919			
Brand_attitude_2					,917			
Brand_attitude_3					,878			
Brand_familiarity_1						,774		
Brand_familiarity_2						,805		
Brand_familiarity_3						,748		
Skepticism_1				,691				
Skepticism_2				,678				
Skepticism_3				,627				
Skepticism_4				,737				
Skepticism_5				,709				
Skepticism_6				,706				
Skepticism_7				,757				
Skepticism_8				,630				
Credibility_1	,842							
Credibility_2	,865							
Credibility_3	,675							
Credibility_4	,596							
Credibility_5	,693							
Credibility_6	,823							
Credibility_7	,827							
Credibility_8	,693							
Credibility_9	,662							
Credibility_10	,871							
Credibility_11	,893							
Credibility_12	,837							
Credibility_13	,786							
Credibility_14	,888							
Credibility_15	,810							
Credibility_16	,747							
CHV_1		,895						
CHV_2		,904						
CHV_3		,787						
CHV_4		,903						
CHV_5		,840						
CHV_6		,600					,574	
CHV_7			,401				,549	
CHV_8		,870						
CHV_9		,822						
CHV_10		,836						
CHV_11		,868						
CBR_trust_1			,809					
CBR_trust_2			,874					
CBR_trust_3			,834					
CBR_trust_4			,842					
CBR_trust_5			,871					
CBR_trust_6			,878					
CBR_WOM_1			,727					
CBR_WOM_2			,768					
CBR_WOM_3			,719					

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12,033	24,065	24,065	11,827	23,654	23,654	9,980	19,959	19,959
2	10,302	20,604	44,669	10,002	20,005	43,659	7,839	15,677	35,636
3	5,085	10,171	54,840	4,722	9,445	53,104	6,896	13,792	49,429
4	3,192	6,384	61,224	2,900	5,801	58,904	3,982	7,963	57,392
5	2,854	5,708	66,932	2,649	5,299	64,203	2,705	5,410	62,802
6	1,809	3,619	70,551	1,506	3,012	67,215	2,006	4,013	66,815
7	1,477	2,954	73,505	1,135	2,271	69,486	1,275	2,550	69,366
8	1,055	2,109	75,614	,722	1,444	70,930	,782	1,564	70,930
9	,882	1,764	77,378						
10	,773	1,545	78,924						
11	,704	1,407	80,331						
12	,668	1,336	81,666						
13	,600	1,200	82,866						
14	,556	1,112	83,978						
15	,526	1,052	85,030						
16	,489	,978	86,008						
17	,472	,943	86,951						
18	,446	,893	87,844						
19	,416	,833	88,677						
20	,383	,767	89,444						
21	,353	,707	90,151						
22	,341	,681	90,832						
23	,326	,652	91,484						
24	,313	,626	92,110						
25	,305	,610	92,719						
26	,263	,526	93,246						
27	,244	,488	93,734						
28	,229	,458	94,191						
29	,213	,426	94,617						
30	,207	,413	95,030						
31	,199	,397	95,428						
32	,193	,386	95,814						
33	,188	,377	96,191						
34	,166	,332	96,523						
35	,161	,321	96,844						
36	,159	,318	97,162						
37	,150	,300	97,463						
38	,143	,286	97,748						
39	,137	,275	98,023						
40	,133	,266	98,289						
41	,129	,258	98,547						
42	,110	,219	98,767						
43	,108	,216	98,983						
44	,092	,185	99,167						
45	,088	,176	99,344						
46	,080	,160	99,503						
47	,073	,147	99,650						
48	,066	,133	99,782						
49	,056	,112	99,894						
50	,053	,106	100,000						

Extraction Method: Principal Axis Factoring.

Factor Analysis (Rerun, deleted Item CHV_7)

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11,718	23,915	23,915	11,521	23,511	23,511	9,959	20,325	20,325
2	10,302	21,024	44,940	10,003	20,415	43,926	7,879	16,080	36,405
3	5,085	10,378	55,318	4,721	9,634	53,561	6,665	13,601	50,006
4	3,180	6,490	61,807	2,890	5,897	59,458	3,974	8,111	58,117
5	2,849	5,815	67,622	2,645	5,399	64,857	2,699	5,509	63,626
6	1,806	3,686	71,308	1,506	3,074	67,931	2,007	4,096	67,723
7	1,252	2,556	73,863	,905	1,847	69,778	,918	1,873	69,596
8	1,034	2,110	75,973	,708	1,445	71,223	,798	1,628	71,223
9	,869	1,773	77,746						
10	,768	1,567	79,313						
11	,695	1,418	80,731						
12	,649	1,325	82,056						
13	,597	1,218	83,274						
14	,556	1,134	84,408						
15	,499	1,019	85,427						
16	,488	,996	86,423						
17	,462	,942	87,365						
18	,416	,850	88,215						
19	,385	,786	89,001						
20	,354	,722	89,723						
21	,342	,698	90,421						
22	,329	,672	91,093						
23	,321	,655	91,748						
24	,308	,628	92,377						
25	,273	,556	92,933						
26	,245	,501	93,434						
27	,239	,487	93,921						
28	,228	,465	94,387						
29	,209	,426	94,812						
30	,205	,418	95,230						
31	,196	,400	95,631						
32	,191	,391	96,022						
33	,181	,370	96,392						
34	,165	,337	96,729						
35	,161	,328	97,057						
36	,156	,319	97,376						
37	,143	,292	97,668						
38	,140	,285	97,953						
39	,135	,275	98,227						
40	,132	,269	98,496						
41	,110	,224	98,721						
42	,109	,223	98,943						
43	,094	,192	99,135						
44	,090	,184	99,319						
45	,083	,170	99,489						
46	,074	,151	99,639						
47	,067	,136	99,776						
48	,056	,115	99,891						
49	,054	,109	100,000						

Extraction Method: Principal Axis Factoring.

Rotated Factor Matrix[a]

	Factor							
	1	2	3	4	5	6	7	8
Brand_attitude_1					,919			
Brand_attitude_2					,916			
Brand_attitude_3					,882			
Brand_familiarity_1						,776		
Brand_familiarity_2						,808		
Brand_familiarity_3						,747		
Skepticism_1				,690				
Skepticism_2				,678				
Skepticism_3				,630				
Skepticism_4				,736				
Skepticism_5				,705				
Skepticism_6				,703				
Skepticism_7				,757				
Skepticism_8				,631				
Credibility_1	,844							
Credibility_2	,867							
Credibility_3	,666						,443	
Credibility_4	,600							
Credibility_5	,687							
Credibility_6	,826							
Credibility_7	,823							
Credibility_8	,687							
Credibility_9	,653						,461	
Credibility_10	,870							
Credibility_11	,896							
Credibility_12	,837							
Credibility_13	,786							
Credibility_14	,889							
Credibility_15	,813							
Credibility_16	,750							
CHV_1		,893						
CHV_2		,900						
CHV_3		,793						
CHV_4		,901						
CHV_5		,849						
CHV_6		,623						
CHV_8		,881						
CHV_9		,827						
CHV_10		,843						
CHV_11		,868						
CBR_trust_1			,806					
CBR_trust_2			,873					
CBR_trust_3			,832					
CBR_trust_4			,839					
CBR_trust_5			,872					
CBR_trust_6			,875					
CBR_WOM_1			,724					
CBR_WOM_2			,765					
CBR_WOM_3			,717					

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.

Appendix F: Reliability Analysis Cronbach

Scale: Attitude

Case Processing Summary

		N	%
	Valid	211	70,3
Cases	Excluded[a]	89	29,7
	Total	300	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,945	3

Item Statistics

	Mean	Std. Deviation	N
Brand_attitude_1	4,96	1,266	211
Brand_attitude_2	4,92	1,270	211
Brand_attitude_3	4,78	1,296	211

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Brand_attitude_1	9,70	6,068	,892	,915
Brand_attitude_2	9,73	6,044	,893	,914
Brand_attitude_3	9,88	6,019	,871	,931

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
14,66	13,235	3,638	3

Scale: Familiarity

Case Processing Summary

		N	%
Cases	Valid	211	70,3
	Excluded[a]	89	29,7
	Total	300	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,839	3

Item Statistics

	Mean	Std. Deviation	N
Brand_familiarity_1	4,77	1,712	211
Brand_familiarity_2	4,00	1,592	211
Brand_familiarity_3	3,35	1,797	211

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Brand_familiarity_1	7,35	9,248	,724	,754
Brand_familiarity_2	8,12	10,086	,702	,778
Brand_familiarity_3	8,77	9,074	,685	,796

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
12,12	19,714	4,440	3

Scale: Skepticism

Case Processing Summary

		N	%
	Valid	300	100,0
Cases	Excluded^a	0	,0
	Total	300	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,886	8

Item Statistics

	Mean	Std. Deviation	N
Skepticism_1	3,02	,875	300
Skepticism_2	3,39	,974	300
Skepticism_3	3,31	,926	300
Skepticism_4	2,80	,926	300
Skepticism_5	2,72	,979	300
Skepticism_6	2,79	,925	300
Skepticism_7	2,87	,923	300
Skepticism_8	3,16	,910	300

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Skepticism_1	21,03	24,287	,662	,871
Skepticism_2	20,67	23,748	,639	,873
Skepticism_3	20,74	24,218	,624	,875
Skepticism_4	21,26	23,711	,686	,868
Skepticism_5	21,34	23,749	,635	,874
Skepticism_6	21,27	24,076	,642	,873
Skepticism_7	21,19	23,412	,728	,864
Skepticism_8	20,90	24,298	,628	,874

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
24,06	30,763	5,546	8

Scale: Credibility

Case Processing Summary

		N	%
Cases	Valid	300	100,0
	Excluded^a	0	,0
	Total	300	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,966	16

Item Statistics

	Mean	Std. Deviation	N
Credibility_1	4,02	1,791	300
Credibility_2	3,89	1,543	300
Credibility_3	3,63	1,698	300
Credibility_4	4,86	1,595	300
Credibility_5	3,88	1,662	300
Credibility_6	4,42	1,518	300
Credibility_7	3,55	1,642	300
Credibility_8	3,37	1,709	300
Credibility_9	3,43	1,689	300
Credibility_10	3,99	1,488	300
Credibility_11	3,96	1,564	300
Credibility_12	4,04	1,369	300
Credibility_13	3,83	1,715	300
Credibility_14	3,87	1,602	300
Credibility_15	4,13	1,438	300
Credibility_16	3,73	1,748	300

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
62,59	440,397	20,986	16

Scale: Conversational Human Voice

Case Processing Summary

		N	%
Cases	Valid	300	100,0
	Excluded[a]	0	,0
	Total	300	100,0

Reliability Statistics

Cronbach's Alpha	N of Items
,967	11

Item Statistics

	Mean	Std. Deviation	N
CHV_1	3,11	1,485	300
CHV_2	3,21	1,463	300
CHV_3	3,10	1,442	300
CHV_4	3,22	1,501	300
CHV_5	2,91	1,457	300
CHV_6	2,15	1,327	300
CHV_7	2,23	1,345	300
CHV_8	2,79	1,426	300
CHV_9	2,92	1,413	300
CHV_10	2,85	1,446	300
CHV_11	3,17	1,414	300

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CHV_1	28,55	151,747	,893	,963
CHV_2	28,45	152,161	,896	,963
CHV_3	28,56	154,214	,847	,964
CHV_4	28,44	151,097	,902	,962
CHV_5	28,75	152,797	,881	,963
CHV_6	29,51	160,271	,733	,967
CHV_7	29,43	166,688	,523	,973
CHV_8	28,87	152,037	,926	,962
CHV_9	28,74	154,382	,862	,964
CHV_10	28,81	152,952	,883	,963
CHV_11	28,49	153,903	,876	,963

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
31,66	186,640	13,662	11

Scale: CBR Trust

Case Processing Summary

		N	%
	Valid	300	100,0
Cases	Excluded[a]	0	,0
	Total	300	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,966	6

Item Statistics

	Mean	Std. Deviation	N
CBR_trust_1	3,31	,922	300
CBR_trust_2	3,27	1,034	300
CBR_trust_3	3,10	,969	300
CBR_trust_4	3,18	1,012	300
CBR_trust_5	3,14	,975	300
CBR_trust_6	3,16	1,036	300

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CBR_trust_1	15,86	21,943	,864	,962
CBR_trust_2	15,89	20,657	,908	,957
CBR_trust_3	16,07	21,434	,879	,960
CBR_trust_4	15,99	21,057	,881	,960
CBR_trust_5	16,03	21,243	,898	,958
CBR_trust_6	16,00	20,612	,911	,957

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
19,17	30,260	5,501	6

Scale: CBR WOM

Case Processing Summary

		N	%
Cases	Valid	300	100,0
	Excluded[a]	0	,0
	Total	300	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,945	3

Item Statistics

	Mean	Std. Deviation	N
CBR_WOM_1	3,26	,994	300
CBR_WOM_2	3,11	1,041	300
CBR_WOM_3	3,09	1,026	300

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CBR_WOM_1	6,20	4,009	,867	,934
CBR_WOM_2	6,35	3,720	,908	,903
CBR_WOM_3	6,37	3,847	,883	,922

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
9,46	8,450	2,907	3

Appendix G: Testing of MANCOVA Assumptions

Outlier Inspection using Boxplots

Brand Attitude and Familiarity
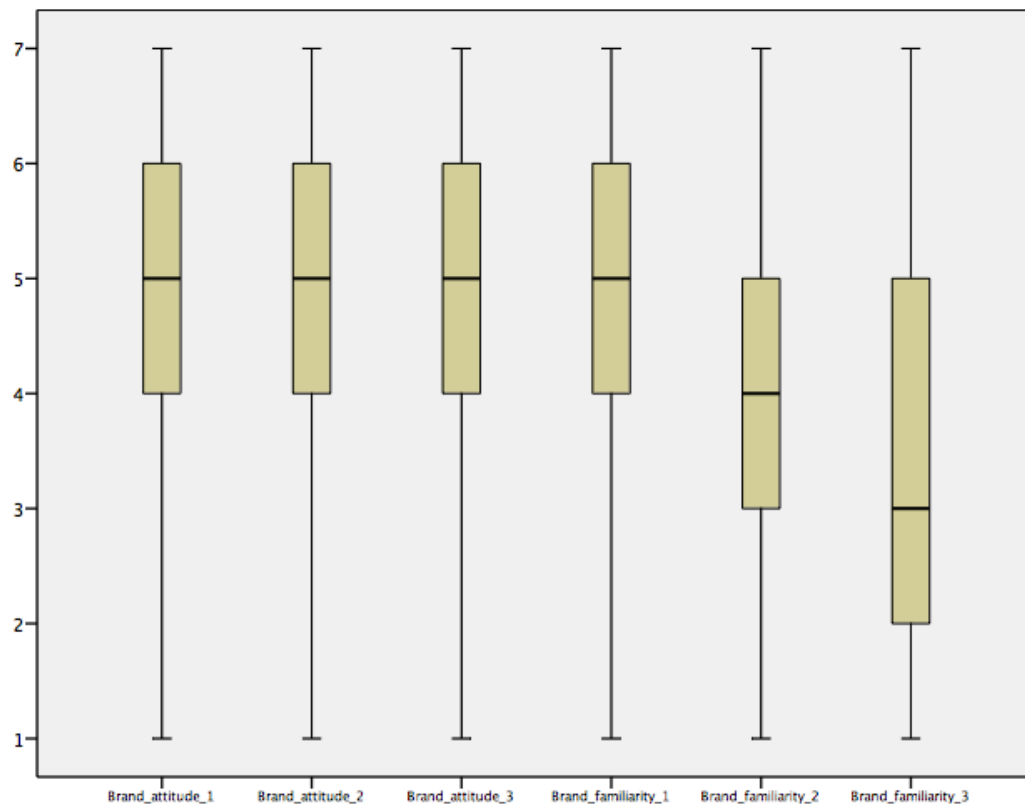
Skepticism
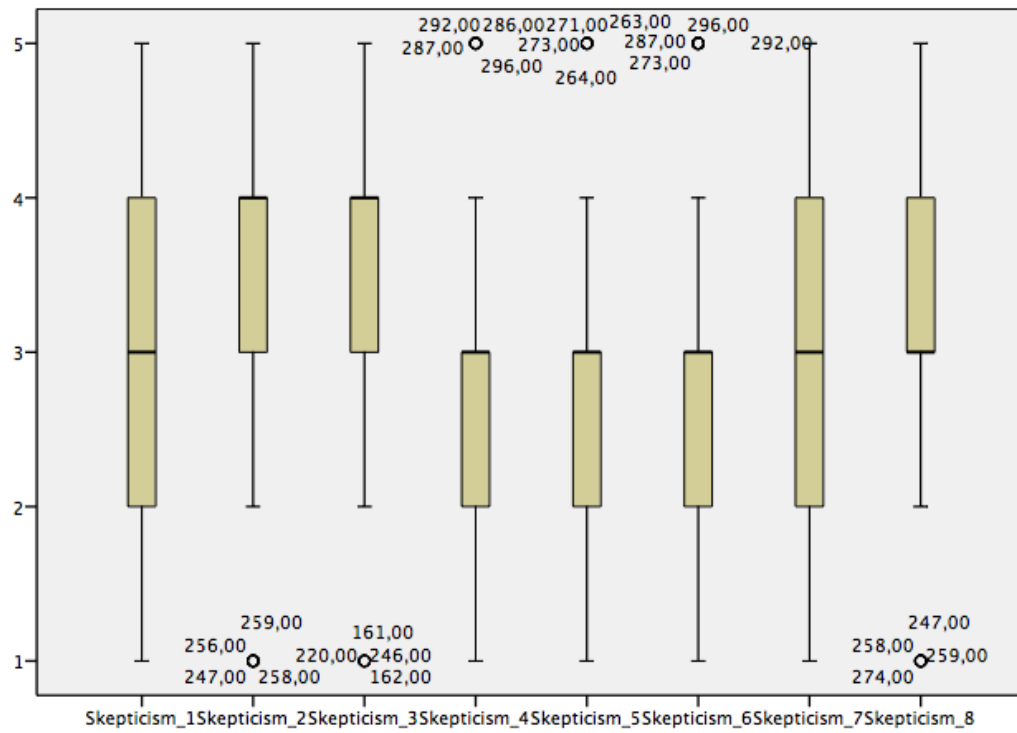
Credibility
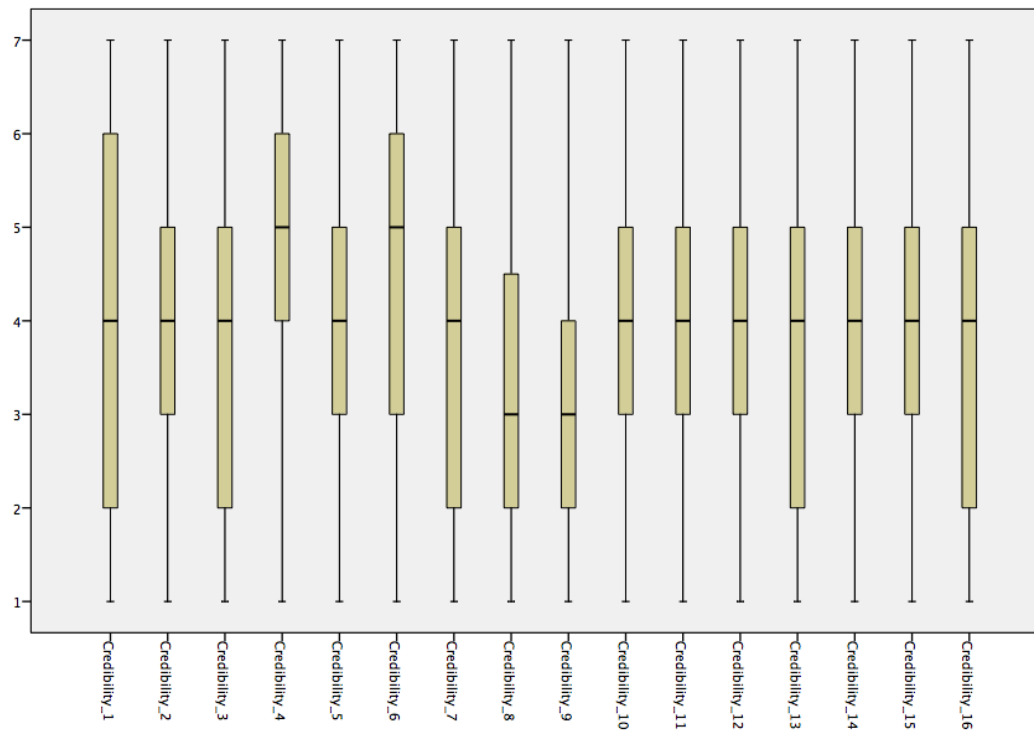
Conversational Human Voice
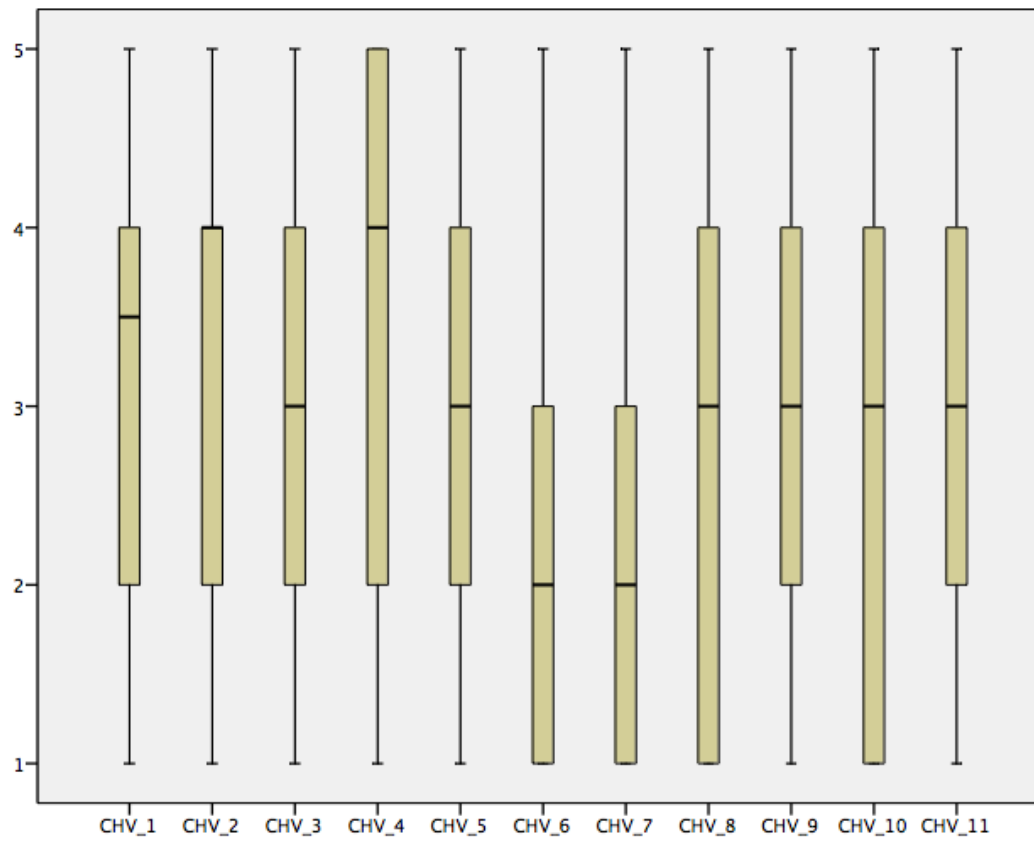
Customer based Reputation
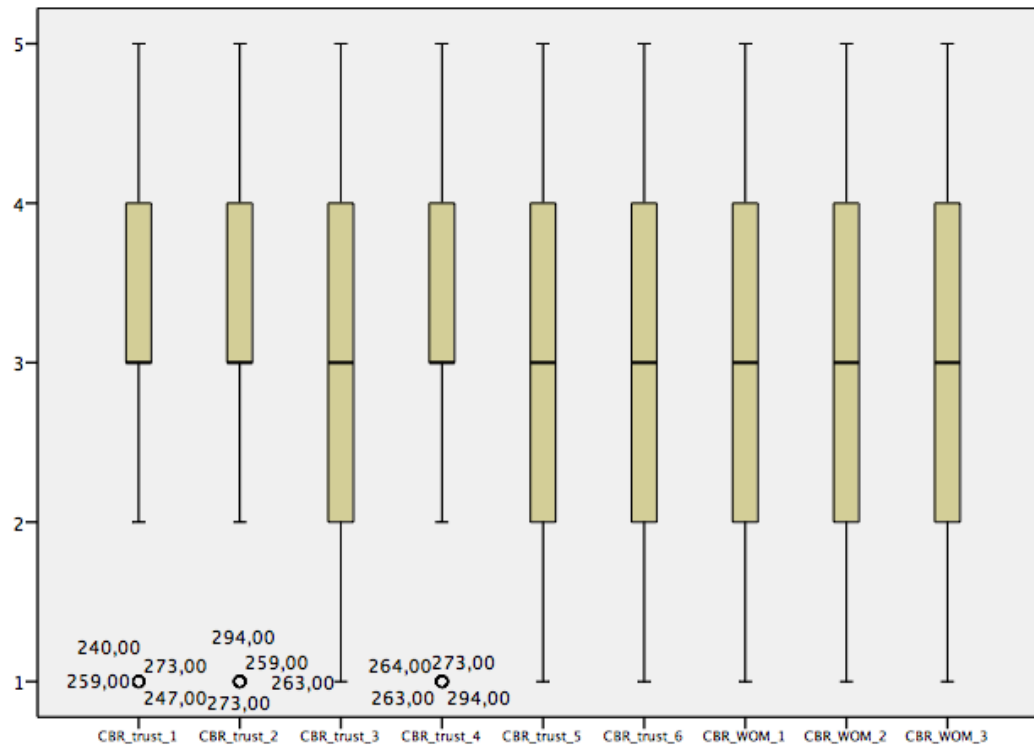
Group Sizes (After deleting cases 247, 258, 259, 263, 273, 287, 292, 294, 296)

Scenario

		Frequency	Percent	Valid Percent	Cumulative Percent
	Low-Low	66	22,7	22,7	22,7
	Low-High	80	27,5	27,5	50,2
Valid	High-Low	79	27,1	27,1	77,3
	High-High	66	22,7	22,7	100,0
	Total	291	100,0	100,0	

No Multicollinearity among Dependent Variables

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-,119	,278		-,428	,669		
	Mean_CBR_trust	,678	,111	,487	6,091	,000	,300	3,336
	Mean_CBR_WOM	,268	,103	,208	2,609	,010	,302	3,311
	Mean_Credibility	-,002	,042	-,003	-,057	,955	,984	1,016

a. Dependent Variable: Mean_CHV

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4,443	,285		15,567	,000		
	Mean_CBR_trust	-,237	,164	-,164	-1,445	,149	,267	3,740
	Mean_CBR_WOM	,073	,145	,054	,502	,616	,295	3,386
	Mean_CHV	-,005	,082	-,004	-,057	,955	,550	1,818

a. Dependent Variable: Mean_Credibility

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,838	,130		6,462	,000		
	Mean_CBR_WOM	,636	,036	,687	17,794	,000	,621	1,611
	Mean_CHV	,169	,028	,235	6,091	,000	,621	1,610
	Mean_Credibility	-,030	,021	-,044	-1,445	,149	,992	1,009

a. Dependent Variable: Mean_CBR_trust

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,206	,158		1,304	,193		
	Mean_CHV	,087	,033	,111	2,609	,010	,563	1,776
	Mean_Credibility	,012	,024	,016	,502	,616	,985	1,015
	Mean_CBR_trust	,825	,046	,764	17,794	,000	,558	1,791

a. Dependent Variable: Mean_CBR_WOM

Test of Univariate Normality for Dependent Measures (Shapiro-Wilk Test)

Group 1 – Low Credibility, Low CHV
Significant (p < 0,05) → Not normally distributed
Tests of Normality[a]

	Kolmogorov-Smirnov[b]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Mean_Credibility	,113	66	,036	,926	66	,001
Mean_CHV	,111	66	,043	,940	66	,003
Mean_CBR_trust	,102	66	,086	,967	66	,078
Mean_CBR_WOM	,164	66	,000	,946	66	,006

a. Scenario = Low-Low
b. Lilliefors Significance Correction

Group 2 – Low Credibility, High CHV
Significant (p < 0,05) → Not normally distributed
Tests of Normality[a]

	Kolmogorov-Smirnov[b]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Mean_Credibility	,084	80	,200[*]	,977	80	,156
Mean_CHV	,116	80	,010	,902	80	,000
Mean_CBR_trust	,097	80	,060	,961	80	,017
Mean_CBR_WOM	,113	80	,013	,949	80	,003

*. This is a lower bound of the true significance.
a. Scenario = Low-High
b. Lilliefors Significance Correction

Group 3 – High Credibility, low CHV
Significant (p < 0,05) → Not normally distributed
Tests of Normality[a]

	Kolmogorov-Smirnov[b]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Mean_Credibility	,079	79	,200[*]	,984	79	,416
Mean_CHV	,124	79	,004	,932	79	,000
Mean_CBR_trust	,093	79	,086	,972	79	,081
Mean_CBR_WOM	,170	79	,000	,922	79	,000

*. This is a lower bound of the true significance.
a. Scenario = High-Low
b. Lilliefors Significance Correction

Group 4 – High Credibility, high CHV
Significant (p < 0,05) → Not normally distributed
Tests of Normality[a]

	Kolmogorov-Smirnov[b]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Mean_Credibility	,080	66	,200[*]	,980	66	,348
Mean_CHV	,119	66	,021	,942	66	,004
Mean_CBR_trust	,132	66	,006	,966	66	,068
Mean_CBR_WOM	,205	66	,000	,935	66	,002

*. This is a lower bound of the true significance.
a. Scenario = High-High
b. Lilliefors Significance Correction

Test of Homogeneity of Variances

Non-significant → assumption fulfilled

Levene's Test of Equality of Error Variances[a]

	F	df1	df2	Sig.
Mean_CBR_trust	3,457	3	201	,017
Mean_CBR_WOM	4,870	3	201	,003
Mean_Credibility	2,783	3	201	,042
Mean_CHV	,488	3	201	,691

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + mean_brand_attitude + mean_brand_familiarity + Mean_Skepticism + Group

Correlations among Dependent Variables and potential Covariates

→ No Correlations

Correlations

		Mean_Skepticism	Mean_Credibility	Mean_CHV	Mean_CBR_trust	Mean_CBR_WOM	mean_brand_attitude	mean_brand_familiarity
Mean_Skepticism	Pearson Correlation	1	-,005	,023	,209[**]	,156[**]	,108	,149[*]
	Sig. (1-tailed)		,463	,346	**,000**	,004	,061	,016
	Sum of Squares and Cross-products	123,722	-1,313	5,373	34,634	27,875	17,212	28,881
	Covariance	,427	-,005	,019	,119	,096	,084	,142
	N	291	291	291	291	291	205	205
Mean_Credibility	Pearson Correlation	-,005	1	-,079	-,121[*]	-,085	,026	-,057
	Sig. (1-tailed)	,463		,088	,019	,073	,354	,210
	Sum of Squares and Cross-products	-1,313	465,173	-35,459	-38,983	-29,601	8,003	-20,970
	Covariance	-,005	1,604	-,122	-,134	-,102	,039	-,103
	N	291	291	291	291	291	205	205
Mean_CHV	Pearson Correlation	,023	-,079	1	,661[**]	,615[**]	,059	,053
	Sig. (1-tailed)	,346	,088		**,000**	**,000**	,201	,224
	Sum of Squares and Cross-products	5,373	-35,459	428,501	203,556	204,548	17,096	18,820
	Covariance	,019	-,122	1,478	,702	,705	,084	,092
	N	291	291	291	291	291	205	205
Mean_CBR_trust	Pearson Correlation	,209[**]	-,121[*]	,661[**]	1	,835[**]	,130[*]	,197[**]
	Sig. (1-tailed)	,000	,019	**,000**		**,000**	,031	,002
	Sum of Squares and Cross-products	34,634	-38,983	203,556	221,350	199,712	27,271	50,195
	Covariance	,119	-,134	,702	,763	,689	,134	,246
	N	291	291	291	291	291	205	205
Mean_CBR_WOM	Pearson Correlation	,156[**]	-,085	,615[**]	,835[**]	1	,132[*]	,203[**]
	Sig. (1-tailed)	,004	,073	**,000**	**,000**		,029	,002

	Sum of Squares and Cross-products	27,875	-29,601	204,548	199,712	258,271	30,226	56,482
	Covariance	,096	-,102	,705	,689	,891	,148	,277
	N	291	291	291	291	291	205	205
mean_brand_attitude	Pearson Correlation	,108	,026	,059	,130*	,132*	1	,315**
	Sig. (1-tailed)	,061	,354	,201	,031	,029		**,000**
	Sum of Squares and Cross-products	17,212	8,003	17,096	27,271	30,226	306,951	117,514
	Covariance	,084	,039	,084	,134	,148	1,505	,576
	N	205	205	205	205	205	205	205
mean_brand_familiarity	Pearson Correlation	,149*	-,057	,053	,197**	,203**	,315**	1
	Sig. (1-tailed)	,016	,210	,224	,002	,002	**,000**	
	Sum of Squares and Cross-products	28,881	-20,970	18,820	50,195	56,482	117,514	454,589
	Covariance	,142	-,103	,092	,246	,277	,576	2,228
	N	205	205	205	205	205	205	205

**. Correlation is significant at the 0.01 level (1-tailed).

*. Correlation is significant at the 0.05 level (1-tailed).

Appendix H: Manipulation and Realism Check

Independent Samples T-Test

Group: High vs. Low Credibility

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
Mean_Credibility	Low Credibility	145	3,0953	,99076	,08228
	High Credibility	146	4,6905	,97800	,08094

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Mean_Credibility	Equal variances assumed	,002	,967	-13,822	289	,000	-1,59524	,11541	-1,82239	-1,36808
	Equal variances not assumed			-13,822	288,886	,000	-1,59524	,11542	-1,82240	-1,36807

Group: High vs. Low CHV

Group Statistics

	Scenario	N	Mean	Std. Deviation	Std. Error Mean
Mean_CHV	Low CHV	145	1,9235	,71387	,05928
	High CHV	146	3,8611	,75195	,06223

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Mean_CHV	Equal variances assumed	,107	,744	-22,540	289	,000	-1,93763	,08596	-2,10683	-1,76844
	Equal variances not assumed			-22,544	288,415	,000	-1,93763	,08595	-2,10680	-1,76847

Appendix I: Testing of Hypothesis

Hypothesis 1: CHV has effect on CBR

Between-Subjects Factors

		Value Label	N
Scenario	1	Low CHV	145
	2	High CHV	146

Multivariate Test Results

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	**,252**	**48,550[a]**	**2,000**	**288,000**	**,000**	**,252**
Wilks' lambda	,748	48,550[a]	2,000	288,000	,000	,252
Hotelling's trace	,337	48,550[a]	2,000	288,000	,000	,252
Roy's largest root	,337	48,550[a]	2,000	288,000	,000	,252
a. Exact statistic						

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Mean_CBR_trust	54,515[a]	1	54,515	94,433	,000	,246
	Mean_CBR_WOM	53,847[b]	1	53,847	76,126	,000	,208
Intercept	Mean_CBR_trust	3006,748	1	3006,748	5208,445	,000	,947
	Mean_CBR_WOM	2895,314	1	2895,314	4093,194	,000	,934
Group	**Mean_CBR_trust**	**54,515**	**1**	**54,515**	**94,433**	**,000**	**,246**
	Mean_CBR_WOM	**53,847**	**1**	**53,847**	**76,126**	**,000**	**,208**
Error	Mean_CBR_trust	166,835	289	,577			
	Mean_CBR_WOM	204,424	289	,707			
Total	Mean_CBR_trust	3230,917	291				
	Mean_CBR_WOM	3156,333	291				
Corrected Total	Mean_CBR_trust	221,350	290				
	Mean_CBR_WOM	258,271	290				
a. R Squared = ,246 (Adjusted R Squared = ,244)							
b. R Squared = ,208 (Adjusted R Squared = ,206)							

Univariate Test Results

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	Mean_CBR_trust	54,515	1	54,515	94,433	,000	,246
	Mean_CBR_WOM	53,847	1	53,847	76,126	,000	,208
Error	Mean_CBR_trust	166,835	289	,577			
	Mean_CBR_WOM	204,424	289	,707			

Scenario

Dependent Variable	Scenario	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Mean_CBR_trust	Low CHV	2,782	,063	2,657	2,906
	High CHV	3,647	,063	3,523	3,771
Mean_CBR_WOM	Low CHV	2,724	,070	2,587	2,862
	High CHV	3,584	,070	3,447	3,721

Contrast Results (K Matrix)

Scenario Simple Contrast[a]		Dependent Variable	
		Mean_CBR_trust	Mean_CBR_WOM
Level 2 vs. Level 1	Contrast Estimate	,866	,860
	Hypothesized Value	0	0
	Difference (Estimate - Hypothesized)	,866	,860
	Std. Error	,089	,099
	Sig.	,000	,000
	95% Confidence Interval for Difference — Lower Bound	,690	,666
	Upper Bound	1,041	1,054

a. Reference category = 1

Descriptives

	Scenario			Statistic	Std. Error
Mean_CBR_trust	Low CHV	Mean		2,7816	,06609
		95% Confidence Interval for Mean	Lower Bound	2,6510	
			Upper Bound	2,9122	
		5% Trimmed Mean		2,7621	
		Median		2,8333	
		Variance		,633	
		Std. Deviation		,79580	
		Minimum		1,00	
		Maximum		5,00	
		Range		4,00	
		Interquartile Range		1,33	
		Skewness		,381	,201
		Kurtosis		-,185	,400
	High CHV	Mean		3,6473	,05977
		95% Confidence Interval for Mean	Lower Bound	3,5291	
			Upper Bound	3,7654	
		5% Trimmed Mean		3,6549	
		Median		3,6667	
		Variance		,522	
		Std. Deviation		,72225	
		Minimum		1,67	
		Maximum		5,00	
		Range		3,33	
		Interquartile Range		,88	
		Skewness		,046	,201
		Kurtosis		-,185	,399
Mean_CBR_WOM	Low CHV	Mean		2,7241	,07150
		95% Confidence Interval for Mean	Lower Bound	2,5828	
			Upper Bound	2,8655	
		5% Trimmed Mean		2,7018	
		Median		2,6667	
		Variance		,741	
		Std. Deviation		,86097	
		Minimum		1,00	
		Maximum		5,00	
		Range		4,00	
		Interquartile Range		1,17	
		Skewness		,496	,201
		Kurtosis		-,309	,400
	High CHV	Mean		3,5845	,06793
		95% Confidence Interval for Mean	Lower Bound	3,4502	
			Upper Bound	3,7187	

		5% Trimmed Mean	3,6015	
		Median	3,6667	
		Variance	,674	
		Std. Deviation	,82077	
		Minimum	1,00	
		Maximum	5,00	
		Range	4,00	
		Interquartile Range	1,00	
		Skewness	-,203	,201
		Kurtosis	-,063	,399

Hypothesis 2a: CHV high & Cred Low has effect on CBR (Control: CHV high & Cred high)

Between-Subjects Factors

		Value Label	N
Scenario	2	Low-High	80
	4	High-High	66

Multivariate Test Results

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	,030	2,195[a]	2,000	143,000	,115	,030
Wilks' lambda	,970	2,195[a]	2,000	143,000	,115	,030
Hotelling's trace	,031	2,195[a]	2,000	143,000	,115	,030
Roy's largest root	,031	2,195[a]	2,000	143,000	,115	,030

a. Exact statistic

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Mean_CBR_trust	,258[a]	1	,258	,492	,484	,003
	Mean_CBR_WOM	,210[b]	1	,210	,311	,578	,002
Intercept	Mean_CBR_trust	1920,040	1	1920,040	3667,805	,000	,962
	Mean_CBR_WOM	1862,420	1	1862,420	2751,497	,000	,950
Group	Mean_CBR_trust	,258	1	,258	,492	,484	,003
	Mean_CBR_WOM	,210	1	,210	,311	,578	,002
Error	Mean_CBR_trust	75,382	144	,523			
	Mean_CBR_WOM	97,470	144	,677			
Total	Mean_CBR_trust	2017,806	146				
	Mean_CBR_WOM	1973,556	146				
Corrected Total	Mean_CBR_trust	75,639	145				
	Mean_CBR_WOM	97,680	145				

a. R Squared = ,003 (Adjusted R Squared = -,004)
b. R Squared = ,002 (Adjusted R Squared = -,005)

Univariate Test Results

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	Mean_CBR_trust	,258	1	,258	,492	,484	,003
	Mean_CBR_WOM	,210	1	,210	,311	,578	,002
Error	Mean_CBR_trust	75,382	144	,523			
	Mean_CBR_WOM	97,470	144	,677			

Scenario

Dependent Variable	Scenario	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Mean_CBR_trust	Low-High	3,685	,081	3,526	3,845
	High-High	3,601	,089	3,425	3,777
Mean_CBR_WOM	Low-High	3,550	,092	3,368	3,732
	High-High	3,626	,101	3,426	3,826

Hypothesis 3a: CHV low & Cred high has effect on CBR (Control: CHV low & Cred low)

Between-Subjects Factors

		Value Label	N
Scenario	1	Low-Low	66
	3	High-Low	79

Multivariate Test Results

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's trace	,004	,257[a]	2,000	142,000	,774	,004
Wilks' lambda	,996	,257[a]	2,000	142,000	,774	,004
Hotelling's trace	,004	,257[a]	2,000	142,000	,774	,004
Roy's largest root	,004	,257[a]	2,000	142,000	,774	,004

a. Exact statistic

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Mean_CBR_trust	,324[a]	1	,324	,510	,476	,004
	Mean_CBR_WOM	,179[b]	1	,179	,241	,624	,002
Intercept	Mean_CBR_trust	1116,306	1	1116,306	1756,679	,000	,925
	Mean_CBR_WOM	1069,868	1	1069,868	1435,676	,000	,909
Group	Mean_CBR_trust	,324	1	,324	,510	,476	,004
	Mean_CBR_WOM	,179	1	,179	,241	,624	,002
Error	Mean_CBR_trust	90,871	143	,635			
	Mean_CBR_WOM	106,564	143	,745			
Total	Mean_CBR_trust	1213,111	145				
	Mean_CBR_WOM	1182,778	145				
Corrected Total	Mean_CBR_trust	91,195	144				
	Mean_CBR_WOM	106,743	144				

a. R Squared = ,004 (Adjusted R Squared = -,003)
b. R Squared = ,002 (Adjusted R Squared = -,005)

Univariate Test Results

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	Mean_CBR_trust	,324	1	,324	,510	,476	,004
	Mean_CBR_WOM	,179	1	,179	,241	,624	,002
Error	Mean_CBR_trust	90,871	143	,635			
	Mean_CBR_WOM	106,564	143	,745			

Scenario

Dependent Variable	Scenario	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Mean_CBR_trust	Low-Low	2,833	,098	2,639	3,027
	High-Low	2,738	,090	2,561	2,916
Mean_CBR_WOM	Low-Low	2,763	,106	2,553	2,973
	High-Low	2,692	,097	2,500	2,884

Hypothesis 4: High Skepticism evaluates more negatively on CBR

Between-Subjects Factors

		Value Label	N
Skepticism_Groups	0	Skeptical	207
	1	not Skeptical	84

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	,924	1739,197[b]	2,000	288,000	,000	,924
	Wilks' Lambda	,076	1739,197[b]	2,000	288,000	,000	,924
	Hotelling's Trace	12,078	1739,197[b]	2,000	288,000	,000	,924
	Roy's Largest Root	12,078	1739,197[b]	2,000	288,000	,000	,924
Skepticism_Groups	Pillai's Trace	,023	3,386[b]	2,000	288,000	,035	,023
	Wilks' Lambda	,977	3,386[b]	2,000	288,000	,035	,023
	Hotelling's Trace	,024	3,386[b]	2,000	288,000	,035	,023
	Roy's Largest Root	,024	3,386[b]	2,000	288,000	,035	,023

a. Design: Intercept + Skepticism_Groups
b. Exact statistic

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Mean_CBR_trust	5,045[a]	1	5,045	6,741	,010	,023
	Mean_CBR_WOM	4,601[b]	1	4,601	5,242	,023	,018
Intercept	Mean_CBR_trust	2567,187	1	2567,187	3429,967	,000	,922
	Mean_CBR_WOM	2469,588	1	2469,588	2813,539	,000	,907
Skepticism_Groups	Mean_CBR_trust	5,045	1	5,045	6,741	,010	,023
	Mean_CBR_WOM	4,601	1	4,601	5,242	,023	,018
Error	Mean_CBR_trust	216,304	289	,748			
	Mean_CBR_WOM	253,670	289	,878			
Total	Mean_CBR_trust	3230,917	291				
	Mean_CBR_WOM	3156,333	291				
Corrected Total	Mean_CBR_trust	221,350	290				
	Mean_CBR_WOM	258,271	290				

a. R Squared = ,023 (Adjusted R Squared = ,019)
b. R Squared = ,018 (Adjusted R Squared = ,014)

Skepticism_Groups

Dependent Variable	Skepticism_Groups	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Mean_CBR_trust	Skeptical	3,132	,060	3,014	3,250
	not Skeptical	3,423	,094	3,237	3,608
Mean_CBR_WOM	Skeptical	3,076	,065	2,948	3,204
	not Skeptical	3,353	,102	3,152	3,554