Corporate Reputation in the Volkswagen Emissions Scandal

The Role of Involvement, Emotions, Responsibility and Person-Company Fit

Master Thesis

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Abstract

While some scholars argue that a strong reputation can protect an organization from reputational loss during a crisis, others believe that a high reputation leads to higher expectations among the public, which are violated during a crisis and make the organization suffer. As the role of corporate reputation in the crisis context is still inconclusive in literature, it is thus of interest to investigate to what extent it affects the outcomes of a global crisis for a corporation. In this study, the emissions scandal of the highly reputed corporation the Volkswagen Group (VW) was investigated. The focus is on whether the crisis resulted in reputational loss of and an increased negative word-of-mouth intention towards the VW Group among the German public. The Situational Crisis Communication Theory (SCCT) is employed to conceptualize the crisis context. In addition to crisis responsibility and anger, which have been identified as key predictors of crisis outcomes in the SCCT, this study also examines two potential predictors: The newly introduced concept crisis involvement, and the positive thus less regarded emotion - sympathy. Moreover, the impact of the person-company fit is investigated in this crisis context.

Using a quantitative online survey, this study investigates the mechanism through which the emissions scandal influenced the Volkswagen Group’s reputation and the negative word-of-mouth intention among the German public. These outcomes are compared between the affected and non-affected German public. The data consists of 1475 German respondents in total and the data analysis was conducted by employing the structural equation modeling method. The results suggest that the German respondents evaluate the post-crisis reputation of the VW Group only on a modest level, though, their intention to express negative word-of-mouth is rather low. Both emotions - anger and sympathy - among the German public mediate the impact of perceived crisis responsibility and crisis involvement on post-crisis reputation and negative word-of-mouth intention. However, the impact of crisis responsibility on anger and that of anger on both crisis outcomes is stronger among the affected German public than the non-affected German public, while no difference is observed with respect to sympathy. Next to this, person-company fit is identified as moderator in the relationships. It weakens the impacts of crisis responsibility and crisis involvement on anger, as well strengthens the impact of crisis responsibility on sympathy.
The results of this study imply an extension of the SCCT framework through identifying the role of crisis involvement and person-company fit in the crisis context. Managerial implications are provided with regard to corporate crisis communication. Corporations should consider that not only anger might influence the post-crisis reputation and negative word-of-mouth intention but also sympathy. This implies that corporations should on the one hand mitigate anger and on the other hand reinforce sympathy in order to save themselves from negative crisis outcomes. To achieve this, one options is to carry out low perceived crisis responsibility and crisis involvement. Further, as person-company fit may vary the negative crisis outcomes for both affected and non-affected general public, it is important for corporations to build a strong relationship with current and potential customers.

**Keywords:** Crisis Communication, Corporate Reputation, Negative Word-of-Mouth, Crisis Responsibility, Crisis Involvement, Emotion, Anger, Sympathy, Person-Company Fit, SCCT
### Abbreviations

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AT</td>
<td>Attribution Theory</td>
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<tr>
<td>DV</td>
<td>Dependent Variable</td>
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<td>Engl.</td>
<td>English</td>
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<td>EV</td>
<td>Expectancy Violation</td>
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<td>IV</td>
<td>Independent Variable</td>
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<tr>
<td>KMO</td>
<td>Kaiser-Meyer-Olkin</td>
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<tr>
<td>MI</td>
<td>Modification Index / Modification Indices</td>
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<td>NWOM</td>
<td>Negative Word of Mouth</td>
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<td>SCCT</td>
<td>Situational Crisis Communication Theory</td>
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<td>SE</td>
<td>Standard Error</td>
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<td>SEM</td>
<td>Structural Equation Modeling</td>
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<td>SIT</td>
<td>Social Identity Theory</td>
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<td>VW</td>
<td>Volkswagen</td>
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<td>VW Group</td>
<td>Volkswagen Group</td>
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<td>WOM</td>
<td>Word of Mouth</td>
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1. Introduction

It is a case that dominated the news for months – not only in Germany but also all over the world: the Volkswagen emissions scandal (Volkswagen further stated as VW). Germany, being a country in which “one in seven people earn their living, directly or indirectly, from auto making” (Bender, 2015, para. 3) and where VW cars are the "most famous export" (Bender, 2015, para 4), was shocked. What followed the scandal’s disclosure was a large product recall that is comparable to that of the Toyota recall in 2010 - and from this, the Toyota brand has not completely revived, yet (Murphy, 2015; Vizard, 2015).

The Volkswagen Group (further stated as VW Group) is a German automobile manufacturer. Entailing twelve brands, such as Volkswagen, Audi, Seat, Skoda, Porsche and Lamborghini, it is “the largest carmaker in Europe” (“The Group”, 2014). On September 18, 2015, the corporation was accused of intentionally manipulating VW and Audi cars with sophisticated software to bypass Clean Air Act standards – this incident became known as the VW emissions scandal. The software was installed in millions of diesel cars and enabled the cars to produce up to 40 times more emission than permitted (Geier, 2015; Kollewe, 2015; Woodyar, 2015). This is especially significant, as the VW Group sold its cars with the promise of having low emission (Vizard, 2015). Since then the VW emissions scandal has spread to other countries including the United Kingdom, Germany and Australia (Kollewe, 2015), having affected more than 11 million cars of the brands VW, Audi, Seat, Skoda and Porsche worldwide (Kollewe, 2015), of which 2.4 million alone in Germany (heise online, 2016). Since the emissions scandal has led to several issues for the corporation, such as falling shares (Geier, 2015) and decreasing sales (“VW global sales fell”, 2016), it can be regarded as a crisis for the carmaker. Product recalls constitute a severe and often-faced problem in the automotive industry (Birchall & Milne, 2009) and although communication in product recall crises is significant, it is not well researched until now (Laufer & Jung, 2010). Moreover, as “Volkswagen executives set out to deliberately and criminally break the law” (Vizard, 2015, para. 7), the VW emissions scandal is an especially severe crisis. Lastly, research outside North America is scarce (Lee, 2004) and a greater understanding of international crises is needed (Coombs, 2014). Thus, analyzing the VW emissions scandal would add value to the field of crisis communication research and would provide corporations with valuable knowledge about how crisis communication can be applied in order to save an organization’s reputation from a crisis (Coombs, 2007a).

The VW Group had been known for its solidity and reliability (Griffin, 2015) and had had a strong reputation for years (Fombrun, 2015). Not only was the corporation ranked among the
first 15 companies in the Global RepTrak 100\(^1\) in the past three years (Reputation Institute, 2013, 2014, 2015), it also had, according to the reputation monitor of the economic research institute Dr. Doebler, the highest reputation of all DAX 30 companies in 2015 within the German population (Reidel, 2015). A reputation is widely accepted as an intangible asset for an organization (Coombs, 2007a; Coombs & Holladay, 2006) and a favorable reputation can provide several advantages, such as credibility among customers, commitment of employees and a better financial performance (Fombrun & van Riel, 2004). A crisis, such as the VW emissions scandal, can however lead to negative outcomes for an organization (Coombs, 2007a). It can, for example, harm a corporate reputation (Coombs, 2007a; Coombs & Holladay, 2008) and cause people to use negative word-of-mouth (NWOM), meaning to make negative statements about the organization (Schultz, Utz & Göritz, 2011). It is thus of interest of this study whether the VW emissions scandal affected the corporation’s reputation and whether it has caused people to express NWOM about the VW Group.

Despite the large extent of the emissions scandal, the majority of the German population remained faithful to the VW Group after the scandal had become public. According to a survey that was conducted two weeks after the breakout of the scandal by the management consultancy Prophet, two thirds of the respondents stated that they still trusted VW. 75 percent said that they would continue to buy VW cars “if they liked the vehicle and the price” (Prophet, 2015, as cited in Löhr, 2015) and 63 percent had the opinion that the scandal would be forgotten within a year (Prophet, 2015, as cited in Löhr, 2015). Taking into the fact that the VW Group had had a favorable reputation for years, this study aims to examine how the German public assess post-crisis reputation of the corporation and what their evaluations reply on. Several scholars have addressed the role of a favorable pre-crisis reputation in previous studies. On the one hand, they claim that a strong reputation can protect an organization from reputational loss during a crisis (e.g. Coombs & Holladay, 2006). On the other hand, scholars argue that a high reputation leads to higher expectations among the public, which are violated during a crisis and result in the suffering of the organization (e.g. Rhee & Haunschild, 2006). Thus, the VW Group’s post-crisis reputation is explored in this study.

According to Lee (2004), research on crisis communication has been conducted on two stages. Firstly, response strategies in specific crises have been assessed and secondly, the characteristics of crises that forecast the choice of suitable response strategies were identified. However, most existing research was not audience-oriented (Lee, 2004) and little research has

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\(^1\) The RepTrak Pulse is a measurement for the public opinion of companies detected by an annually conducted global survey by the Reputation Institute. The rating “describes how much consumers trust, like and admire a company” (Fombrun, 2015) and can therefore be evaluated as a useful indicator for a company’s reputation.
included consumer variables, such as emotions or involvement (Choi & Lin, 2009a). This is crucial, though, in order to assess how individuals both understand and react to a crisis (Lee, 2004) and thus which effects the crisis has for the organization. Hence, an increasing number of authors (e.g. Coombs & Holladay, 2002; Dawar & Pillutla, 2000) have called for research on the public opinion of such event (Choi & Lin, 2009b). Moreover, several scholars have suggested including individual variables in crisis communication research (Coombs & Holladay, 2014; Lee, 2004). The present study responds to this perceived bias in research (Coombs, 2014) and focuses on the role of individual variables that are possibly causing different crisis reactions. By including such individual perspectives, knowledge about individuals’ perceptions of and reactions to the crisis can be gained. Based on this knowledge, managerial implications can be made on how corporations can react properly to a crisis.

As Coombs and Holladay (2014) point out, crisis expert have an interest in the knowledge about crisis reactions of important publics. Thereby, important publics are customers but not only customers (Coombs, 2007a) and thus also non-stakeholders and non-affected people. Of the existing studies in crisis communication research, many focused on the reactions of stakeholders to crises, though (e.g. Coombs & Holladay, 2014; Choi & Lin, 2009b; Kiambi & Shafer, 2015). By not only including affected people or stakeholders of the VW Group, this study provides insights of how also less involved people perceive and react to a crisis. This enables the comparison of perceptions and crisis outcomes between affected and non-affected publics, which makes this study even more worthwhile.

Crisis responsibility has been found to play a key role in the perception of a crisis (Coombs, 2007a; Coombs & Holladay, 2005; Kiambi & Shafer, 2015). Responsibility relates to whether people believe that the company can be blamed for the crisis (Coombs, 1995). Depending on the perceived responsibility, people then experience different emotions. Anger and sympathy have been identified as main emotions in the context of a crisis (Coombs & Holladay, 2005) and are assumed to cause behavioral responses (Coombs, 2007a). Being a product-recall crisis, the VW emissions scandal can be categorized as a preventable crisis (Coombs, 2007a; Choi & Chung, 2013) and is thus probable to be attributed with a high level of responsibility. A high level of responsibility has been found to lead to more anger (Choi & Lin, 2009b) and less sympathy (Coombs & Holladay, 2005; Jin, 2014). Emotions in turn can have an impact on peoples’ evaluation of an organization’s post-crisis reputation and can influence behavioral intentions, such as the intention to express NWOM (Coombs, 2007a).

Next to this, the concept of involvement has become of interest in crisis communication. The concept refers to a person’s subjective relevance about a topic (McDonald & Härtel, 2010) and a higher level of involvement in a crisis was found to cause more anger and less sympathy
(McDonald, Sparks & Glendon, 2010). However, crisis involvement is not much researched, yet (Choi & Lin, 2009a). Furthermore, companies today aim to have a strong relationship with its customers because it provides several advantages, such as loyalty (Bhattacharya & Sen, 2003). The customer-company relationship has been argued by Bhattacharya and Sen (2003) by using social identity theory. The theory refers to the feeling of group affiliation and is related to values and emotions. Consumers who identify strongly with a company act in a supportive manner (Chu & Li, 2012). The present study transfers this concept to the German public as the person-company fit. It is argued that Germans have an overall high identification with the VW Group due to the corporation's high reputation and the relevance of the carmaker for Germans. It is explored whether the person-company fit has an impact on the relationship of involvement and responsibility with emotions in the VW crisis.

The present study examines the above-mentioned theoretical concepts by using the Situational Crisis Communication Theory (SCCT) (Coombs 2007a) as groundwork. SCCT is a useful theory for understanding components of a crisis in order to apply proper crisis communication and thus to protect an organization from reputational damage (Coombs, 2007a). However, not all of the relevant concepts and posed links between concepts are included in Coomb’s SCCT. Thus, the existing framework is not only tested on a real crisis but also extended by adding the concepts of involvement and person-company fit as well as the link between emotions and reputation to the framework.

Concluding, this thesis aims to research the outcomes of the VW emissions scandal and the role that the VW Group’s reputation played in the crisis. It further examines the impact of individual perspectives on such crisis outcomes. The following research questions are hence introduced:

**RQ1:** How do Germans perceive the VW Group’s reputation and to what extent do they have the intention to express negative word-of-mouth about the VW Group after the occurrence of the emissions scandal?

**RQ2:** To what extent do crisis involvement, crisis responsibility and emotions (i.e. anger and sympathy) influence the VW Group’s post-crisis reputation and people’s negative word-of-mouth intention? And whether and how do the impacts vary between affected and non-affected German public?

**RQ3:** Whether and how does person-company fit affect the crisis outcomes in this context?
After having introduced the topic of this thesis and the research questions, the second chapter presents the theoretical framework underlying this study as well as results of previous research. According to the theoretical constructs that are relevant for this study, the chapter will be structured into sub-sections that will conclude with one or more hypotheses. Following this, the third chapter will give an overview of the research design as well as the operationalization of the theoretical constructs and the measurement models of the performed structural equation modeling. In the fourth chapter, the results of the data analysis are presented. These findings will be further discussed in chapter five of this thesis before managerial implications will be given, limitations provided and recommendations for future research given.
2. Theoretical Framework and Literature Review

In this chapter, the relevant theoretical concepts will be reviewed as well as prior research findings presented. At the end of each sub-chapter, the theoretical knowledge is applied to the VW emissions scandal, which will then lead to the hypotheses of this study. In order to summarize and visualize the theoretical framework, a conceptual model will be provided at the end of this chapter.

2.1. Corporate Reputation in Crisis Communication

Business scandals of the past years have indicated how important the establishing, maintaining and protection of reputation is for organizations of all kinds (Doorley & Garcia, 2007). In order to understand the complete significance of reputation, though, it is crucial to first define the concept. Until now, several different views on reputation can be recognized (Love & Kraatz, 2009) and many different definitions of reputation exist (van Riel & Fombrun, 2007). For this study, the definition of Coombs and Holladay (2006) is used. According to the researchers “[a] reputation is an evaluation stakeholders make about an organization” (Coombs & Holladay, 2006, p. 123). Thereby, stakeholders are individuals, groups or organizations that have “interest or concern in an organization” and can influence or be influenced by it (“Stakeholder”, n.d.). Some examples for stakeholders are customers, employees and shareholders (“Stakeholder”, n.d.).

A reputation is dependent on an organization’s past actions (Kiambi & Shafer, 2015; van Riel & Fombrun, 2007) and is generated from cognitive associations, which are derived from information that stakeholders receive about an organization over time (Fombrun & van Riel, 2004; Rhee & Haunschild, 2006; van Riel & Fombrun, 2007; Turk et al., 2012). This information can be gained through personal experience with the company, second hand information of other persons such as friends or colleagues and the mass media (Bromley, 2000; Coombs, 2007a; Fombrun & van Riel, 2004; van Riel & Fombrun, 2007; Turk et al., 2012). Thereby, direct personal experience has the greatest impact on reputation, whereas most of the information stems from the mass media (Coombs, 2007a; van Riel & Fombrun, 2007). Stakeholders compare their information about an organization in order to evaluate whether it meets their expectations of the organization’s actions (Fombrun & van Riel, 2004). In case of an expectation gap, meaning that the respondents’ expectations are not met by the organization, issues for the organization can emerge (Coombs, 2007a; Reichart, 2003).

As evaluations, reputations can be favorable and unfavorable (Coombs, 2007a) or in other words positive or negative (Walker, 2010). Favorable reputations are accepted as
intangible assets that have been related to positive outcomes for an organization (Coombs, 2007a; Coombs & Holladay, 2006; Rhee & Haunschild, 2006), or as Fombrun and van Riel (2004) put it: “A good reputation is like a magnet: It attracts us to those who have it” (p. 3). Such benefits can be both tangible and intangible (Doorley & Garcia, 2011). Intangible positive outcomes include for instance the perception of a company's products as more attractive, a higher credibility among customers and a higher commitment of employees (Fombrun & van Riel, 2004). This can potentially be translated into tangible positive outcomes, such as the advantage of paying less for suppliers (Davies, Chun, da Silva & Roper, 2003; Doorley & Garcia, 2011) or an improved financial performance of an organization (Fombrun & van Riel, 2004; Turk et al. 2012). This is for instance because a good reputation can affect the receiving of positive feedback from financial analysts and gaining more and also more favorable media coverage (Davies et al., 2003; Fombrun & van Riel, 2004). Companies with a bad reputation on the other hand can have more difficulties in drawing attention of investors and receiving funding (Aula & Mantere, 2008, as cited in Kiambi & Shafer, 2015) as well as can receive more negative media coverage (Davies et al., 2003). Corporate Reputation has additionally been demonstrated to influence stakeholder's responses to product-harm crises (Laufer & Coombs, 2006), such as emotions and behavioral intentions (Coombs, 2014). Concluding, a positive reputation is of importance for an organization and can even be seen as „the single most valued organizational asset“ (Gibson et al., 2006, p. 15).

Bases on these advantages, Fombrun and van Riel (2004) argue that "reputations [...] must be nurtured and protected" (p. 7). This is especially the case in times of crisis. According to Coombs (2007a), a crisis can be defined as “a sudden and unexpected event that threatens to disrupt an organization's operations and poses both a financial and a reputational threat. Crises can harm stakeholders physically, emotionally and/or financially” (p. 164). A crisis can occur when stakeholders perceive violations of their expectations of an organization (Coombs, 2014). Many different types of stakeholders, including employees, suppliers, customers and stockholders, can be negatively affected by a crisis (Coombs, 2007a). Thus, crises can create victims, meaning people who are actually harmed by it, and potential victims, referring to those who could be affected by the incident. In addition to this, a crisis can generate witnesses, meaning people who gain information about and respond to a crisis (Bies, 1987, as cited in Coombs & Holladay, 2007, p. 300). Thereby, most of the stakeholders are not directly affected (Coombs & Holladay, 2005) but all of these three types of persons might feel some sort of "emotional involvement in the crisis" (Bies, 1987, as cited in Coombs & Holladay, 2007, p. 300) and are connected to the organization due to the incident (Coombs & Holladay, 2007). Thus, the present study is interested in the reactions of not only victims but also non-victims and therefore considers the reactions of the general German public.
As mentioned above, crises usually cause negative publicity (Davies et al., 2003; Dean, 2004). As most stakeholders gain their information about a crisis from news media and the Internet, bad publicity can result in people thinking badly of an organization, which may damage the organization's reputation. This, in turn, may change the way stakeholders perceive and interact with the organization and may then lead to a loss of the above-mentioned benefits that a favorable reputation provides (Coombs, 2007a; Coombs, 2014). In addition, a crisis can result in stakeholders questioning an organization’s credibility (Arpan, 2002), ending their relations with an organization and/or saying negative things about it (Coombs, 2007a).

As crises can have such negative effects for a company, the significance of correctly managing the event should not be underestimated (Laufer & Coombs, 2006) and timely decisions about the crisis response should be made (Doory & Garcia, 2007; McDonald et al., 2010). When a crisis has occurred, organizations have to communicate with stakeholders for several reasons. First of all, they provide information on how to shield themselves from the crisis (instructing information) and information that supports them with psychologically managing the incident (adjusting information). Only the next step is to address the reputational threat by using several reputation-building strategies (Coombs, 2007a; Coombs & Holladay, 2005, 2009). Thereby, an adequate crisis response can function as a benefit and might even increase the organization's reputation. An inadequate crisis response on the other hand can damage an organization's actions, its reputation and threaten its existence (Doorley & Garcia, 2007).

Crisis communication generally refers to „the collection, processing, and dissemination of information required to address a crisis situation“ (Coombs, 2010, p. 20). As especially avoidable crises can endanger an organization's reputation, the main goal of crisis communication is to rebuild both the organization’s reputation and the stakeholder's trust (Utz, Schultz & Glocka, 2013). Thus, crisis management, including crisis communication, and reputation management are highly intertwined (Carroll, 2009). Crisis communication is furthermore a process that can be divided into the three phases pre-crisis communication, crisis communication and post-crisis communication (Coombs, 2010). Pre-crisis communication addresses the preparation for possible threats, crisis communication regards the decisions during the crisis as well as the providing of information to the people and post-crisis communication includes the analysis of previous communication and the possible provision of “follow-up crisis messages” (Coombs, 2010, p. 21). Especially in the context of product recalls, effective communication is essential because it potentially reduces damage (Desai, 2014). As the VW emissions scandal has already gone public over six months ago, the VW Group is currently situated in the post-crisis communication phase. It has to be kept in mind, though, that new details about the crisis are still being revealed.
2.1.1. The Situational Crisis Communication Theory

In order to build and test theory, one line of research in the field of crisis communication has begun to develop the Situational Crisis Communication Theory (SCCT) (Coombs, 2004, 2007a; Coombs & Holladay, 2002; Kim & Cameron, 2011). The SCCT model (see figure 1) has been developed since 2002 (Coombs & Holladay, 2002) and provides a structure for the comprehension of “how crisis communication can be used to protect reputational assets during a crisis” (Coombs, 2007a, p. 163). It can be applied to different types of organizations (Coombs, 2007a) and takes an audience-centered approach, which determines the impact of important aspects of the crisis situation on the stakeholders’ perceived reputation (Coombs, 1998; Coombs, 2007a). Knowledge about how stakeholders react to a crisis can then again influence a company’s post-crisis communication (Coombs, 2007a). Empirical research based on SCCT offers directions for crisis managers on how response strategies can be used in order to save a reputation from a crisis (Coombs, 2007a). This makes the framework especially valuable. Previous research (e.g. Choi & Chung, 2013; Coombs & Holladay, 1996; Dean, 2004) has confirmed such benefit of the usage of the right crisis response strategy (Coombs & Holladay, 2008).

Figure 1: Crisis Situation model of SCCT (based on Coombs, 2007a)
SCCT originated from Attribution Theory (AT) (Weiner, 1985) (Coombs, 1995; 2007a), which is a “theory of motivation and emotion” (Weiner, 1985, p. 548) that suggests that individuals seek for underlying causes of events that happen around them (Weiner, 1985). People constantly ask ‘why’ because they have the need to comprehend and control their environment (Weiner, 1985). According to Folkes (1988), studies about AT in the context of consumer behavior found that consumers make attributions for instance for why they have bought a product or to find the reason for why a service failed. The two key aspects of AT are unexpectancy and negativity because they induce a person's need to look for the reason of an incident (Weiner, 1985, 1986; Coombs, 2007b). Since crises are perceived as unpredictable, negative events, stakeholders associate blame to the involved actors in a crisis (Coombs, 2007a, 2015; Dean, 2004; Laufer & Coombs, 2006).

In order to react properly to a crisis, the potential crisis threat for an organization's reputation needs to be assessed. As Coombs (2007a) explains, “threat is the amount of damage a crisis could inflict on the organization's reputation if no action is taken” (p. 137). Thereby, the reputational threat is determined by the three determinants initial crisis responsibility, crisis history and prior reputation (Coombs, 2007a). Using a two-step process, crisis managers estimate the threat to a reputation. First, they evaluate the initial crisis responsibility, which is based on the type of the crisis. According to the SCCT, crises can be divided into three types, also known as frames, which each present a specific aspect of the particular crisis: victim crisis, accidental crisis and lastly the preventable or intentional crisis (e.g. human-error product harm or organizational misdeed). Each crisis type defines how much responsibility the stakeholders attribute to the organization. Of the three types, the intentional crisis has the strongest attribution of crisis responsibility and poses a severe reputational threat (Coombs & Holladay, 2002; Coombs, 2007a). According to Claeys, Cauberghhe and Vyncke (2010), in the case of preventable crises, even all responsibility is assigned to the organization. Based on the crisis-type, the SCCT then proposes different strategies to respond to the crisis (Coombs, 2007a). The diesel engine manipulations, which resulted in the VW emissions scandal, were performed by employees of the VW Group. Moreover, several managers of the corporation knew about these illegal actions (Neate, 2016, para. 1, 10). As preventable crises involve, for example, management misbehavior, which intentionally endangers stakeholders and/or breaks laws (Coombs, 2004; 2007a), the emissions scandal and recall of VW cars clearly falls into the preventable crisis cluster. As this is the most severe crisis type, it makes the examination of its consequences especially significant.

In the second stage of the assessment of the reputational threat, the intensifying factors crisis history, referring to whether the organization has had a likely event before, and pre-crisis reputation, meaning the reputation before the crisis, are examined (Coombs, 2007a). The
existence of a crisis history or a negative pre-crisis reputation will reinforce the reputational threat of an organization (Coombs, 2007a). However, crisis history was found not to be as important as the pre-crisis reputation of a company (Coombs & Holladay, 2001). Thus, prior reputation is considered to be more important and will therefore be of interest this study.

2.2. Post-crisis reputation

As explained in the previous chapter, one negative outcome for organizations in a crisis is the loss of reputation (Coombs, 2007a; Coombs & Holladay, 2008; Dutta & Pullig, 2011; Kiambi & Shafer, 2015). In this context, it is assumed that the public’s evaluation of a company’s reputation before the crisis influences the company’s recovery (Turk et al., 2012). Thereby, different points of view exist.

On the one hand, it can simply be supposed that a favorable prior reputation operates as a bank account that consists of reputational capital (Alsop, 2004, as cited in Coombs & Holladay, 2006). Reputational capital refers to an organization’s “stock of perceptual assets and social assets” (Fombrun & van Riel, 2004, p. 32). A higher reputational capital could result in more supportive actions by stakeholders (Fombrun & van Riel, 2004). As a crisis will cause some harm to an organization’s reputation, it also leads to a loss of reputational capital (Coombs, 2007a). If an organization has a favorable pre-crisis reputation, thus meaning that it has plenty of reputational capital, it can allow itself to spend or lose some capital in a crisis. In that case, it sustains a strong, favorable reputation after the crisis (Alsop, 2004, as cited in Coombs & Holladay, 2006; Coombs, 2007a; Dowling, 2001). This indicates that organizations with a favorable reputation can suffer as much as those with an unfavorable reputation but will still maintain a better reputation after such an event (Claeys & Cauberghe, 2015). Thus, a good pre-crisis reputation indicates that an organization is harmed less and recovers more rapidly (Coombs, 2007a).

Another more complex explanation is that a favorable prior reputation can function as a shield (Claeys & Cauberghe, 2015) or halo (Coombs & Holladay, 2006) that protects an organization from the loss of reputation (Coombs & Holladay, 2006; Ulmer, 2001). The theories underlying this assumption are expectancy confirmation theory and cognitive dissonance (Claeys & Cauberghe, 2015; Coombs & Holladay, 2006). It is assumed that individuals have expectations about social issues and that they try to avoid experiencing cognitive dissonance. This means that individuals try to obtain information that corresponds with their prior opinions of an issue. Because people try to diminish cognitive dissonance, conflicting information is interpreted in a way that is coherent with the individuals’ previous beliefs (Claeys & Cauberghe, 2015; Coombs & Holladay, 2006; Edwards & Smith, 1996; Perloff, 2010). Likewise, if people
receive crisis information about a favored organization, they might face cognitive dissonance (Perloff, 2010, as cited in Claeyts & Cauberghe, 2015, p. 65). Consumers with a positive attitude may tend to pay more attention to positive information and avoid negative aspects about the organization (Coombs & Holladay, 2006; Claeyts & Cauberghe, 2015). This form of information processing could then result in the avoidance of reputational loss. Additionally, stakeholders could to a certain extent reject the fact that the crisis occurred and thus hold on to their favorable opinion about it. Hence, the crisis will not have a large effect on the relationship between stakeholders and organizations (Coombs & Holladay, 2001, 2006). Consequently, an organization with a favorable pre-crisis reputation would suffer less reputational loss than an organization with an unfavorable pre-crisis reputation. Grunwald and Hempelmann (2011) even assume that the cognitive dissonance mechanism only takes place for well-known and well-reputed organizations. As the VW Group did have a favorable pre-crisis reputation, it is assumed that this process is applicable.

Several scholars have investigated the role of a good pre-crisis reputation and are positive about its benefits for an organization during a crisis by helping to protect a company’s reputational assets as well as being an aid to its repair (Coombs & Holladay, 2006). Studies found for instance that a good prior reputation influenced the public’s opinion and behavioral intentions towards the organization (e.g. Carroll, 2009; Lyon & Cameron, 2004), resulted in a better evaluation of (e.g. Kiambi & Shafer, 2015) and led to a more positive attitude towards the organization (e.g. Turk et al., 2012). Kiambi and Shafer (2015) thus evaluate a good reputation as critical for an organization and emphasize the necessity to establish a favorable pre-crisis reputation. However, since most existing research “is opinion based rather than well researched” (Dowling, 2001, p. 252), there is a shortage of empirical evidence for this assumption (Coombs & Holladay, 2006). Thus, more empirical proof is needed in order to provide advice on the protection of an organization’s reputation from a crisis (Coombs, 2007a; Rousseau, 2006; Kiambi & Shafer, 2015). Moreover, the shielding function of a good reputation has not often been confirmed in previous studies (Claeyts & Cauberghe, 2015). Coombs and Holladay (2006) only found evidence for the occurrence of a halo effect could for organizations with an extremely favorable pre-crisis reputation (Coombs & Holladay, 2006). However, Claeyts and Cauberghe (2015) were able to validate the shielding effect and found evidence for the consumers’ endeavor to avert cognitive dissonance regarding their pre-crisis attitude towards an organization. The consumers were not only to associate lower crisis-responsibility to the organization but also disregarded negative publicity. Thus, consumers were averse to alter their original attitude towards an organization (Claeyts & Cauberghe, 2015).

Despite the above-described relevance of a good pre-crisis reputation for organizations, some researchers (e.g. Dean, 2004; Grunwald & Hempelmann, 2011; Rhee & Haunschild, 2006)
argue that a favorable reputation can also lead to negative consequences for an organization in a crisis, being concerned "about the possibility that a good reputation will backfire and inflict even more severe damage to firms" (Sohn & Lariscy, 2015, p. 238). Compared to a low or a neutral reputation, a favorable reputation could lead to higher expectations of an organization among stakeholders (Rhee & Haunschild, 2006; Sohn & Lariscy, 2015). If these are violated in a crisis, well-reputed organizations will be punished more sternly (Sohn & Lariscy, 2015), for instance, by causing the organizations to pay higher restitutions in order to resolve the incident (Grunwald & Hempelmann, 2011). Sohn and Lariscy (2015) call this the ‘boomerang effect’ of a favorable reputation and justify this phenomenon with the expectancy violations (EV) theory. Contradicting to cognitive dissonance-based views (Sohn & Lariscy, 2015), this theory suggests that instead of fully ignoring or denying contradicting information, people tend to compare their pre-interaction expectations with the target object’s behaviors (Burgoon & LePoire, 1993). The violation of a person’s expectancy rather operates as a trigger for cognitive processing, hence affecting the target's post-interaction judgment in a sense that “positive and negative violations (disconfirmation) lead to more positive and negative interaction outcomes respectively than does conformity to expectations” (Burgoon & LePoire, 1993, p. 69). Initially, the EV theory was developed for the clarification of internal communication (Sohn & Lariscy, 2015). As people are likely to humanize organizations (Davies et al., 2003; Love & Kraatz, 2009) and stakeholders consider them as exchange partners with characteristics such as reliability, which they are evaluated on (Fombrun, 1996; Love & Kraatz, 2009; Sohn & Lariscy, 2015), this theory is also suitable to the interaction of stakeholders and organizations (Sohn & Lariscy, 2015).

Although most researchers have addressed the advantages of a good reputation during a crisis, other scholars argue for a more pessimistic view. As above-described, opponent empirical findings exist, whereas the optimistic view is leading (Sohn & Lariscy, 2015). Given such an ongoing debate, the study at hand explores the post-crisis reputation of the VW Group after the emissions scandal has occurred.

2.3. Negative Word-of-Mouth

Besides the potentially negative effect on reputation, crises can also influence an individual’s behavior intentions, such as NWOM intention (Coombs, 2010; Coombs & Holladay, 2008). Word-of-mouth (WOM) can generally be defined as informal, non-commercial person-to-person communication among communicators about brands, products, services or organizations (Anderson, 1998; Harrison-Walker, 2001; Richins, 1984; Goyette, Ricard, Bergeron & Marticotte, 2010). In the context of this thesis, WOM relates to statements that stakeholders make about a corporation (Schultz et al., 2011), namely the VW Group. WOM can take place face
to face, by phone, email or any other communication channels (Silverman, 2001). WOM can further be of personal origin, for instance from friends or family, and of impersonal origin, such as journalists (Goyette et al., 2010). WOM has long been accepted as a dominant power in building consumers' opinions and behaviors (Brown & Reingen, 1987; Herr, Kardes & Kim, 1991) and is even referred to as „the most powerful force in the marketplace“ (Silvermann, 2001, p. 47). This is mainly because WOM is normally generated by credible sources and is thus believed to have a stronger impact consumers’ judgments than information obtained through commercial print sources, like advertising (Silvermann, 2001; Herr et al. 1991), because they are more "accessible" and "diagnostic" (Herr et al., 1991, p. 459). In addition, WOM can easily reach a large amount of people due to its ability to spread quickly (Silvermann, 2001), especially through new channels, such as online forums (Hennig-Thurau, Gwinner, Walsh & Gremler, 2004).

WOM can be positive, neutral or negative (Anderson, 1998). NWOM „denigrates the object of the communication“ and refers to „a consumer response to dissatisfaction“ (Richins, 1984, p. 697). As it is damaging to a company’s success (Richins, 1984), NWOM can be seen as a threat to organizations (Coombs, Fediuk & Holladay, 2007). Positive WOM on the other hand is an advantage for organizations (Coombs, Fediuk & Holladay, 2007). Moreover, it was found that NWOM has a more intensive influence on customer evaluations than positive WOM (Herr et al., 1991; Laczniak, DeCarlo & Ramaswami, 2001; Mizerski, 1982). More precisely, it significantly influences the evaluation of brands (Laczniak et al., 2001), products (Rea, Wang & Stoner, 2014) and organizations (Kiambi & Shafer, 2015). Additionally, it is considered to be an antecedent for consumer behavior, for instance, it may change a person’s present and future purchase decisions (Chu & Li, 2012; Coombs & Holladay, 2007; Schultz et al., 2011).

NWOM is considered to be particularly powerful and problematic because it can reach many receivers, including people who did not know about the incident before. It can also persist (online) even after a crisis and even after people have already forgotten about the incident. Therefore, it is a threat to organizations (Coombs, 2007a, 2010, 2014; Coombs & Holladay, 2007) and as managers aim to prevent the possible negative outcomes of NWOM (Coombs, 2007b, 2007a) they thus try to avoid NWOM.

Scholars have argued that stakeholders have a tendency to use NWOM in a crisis (e.g. Coombs & Holladay, 2007; Coombs et al., 2007; Kiambi & Shafer, 2015). This relationship has been investigated in several studies. Utz et al. (2013), for instance, found in their research about the Fukushima Daiichi nuclear disaster that respondents used more secondary crisis communication, such as NWOM, in the case of an intentional crisis. Furthermore, Kiambi and Shafer’s (2015) study revealed that an organization with a bad pre-crisis reputation tends to
undergo more intentions of NWOM than those with a good reputation. However, more empirical research on NWOM in crisis communication is needed (Kiambi & Shafer, 2015).

Due to possible negative behaviors following NWOM, the concept is of high importance for corporations. As the intention to use NWOM can be evoked in a crisis, the present study examines the occurrence of NWOM in the VW emissions scandal. Since the VW emissions scandal can be categorized as an intentional crisis, the NWOM intention of the German public is expected to be rather high after the crisis. On the contrary, the VW Group had had a very favorable reputation prior to the emissions scandal, which is why the NWOM intention could be potentially low, as well. The present study thus further investigates the German public’s intention to express NWOM about the VW Group.

2.4. Impact of Personal Perspectives in Crisis Communication

Studies in the field of crisis communication have mainly applied two theories in order to explore publics’ responses to organizations’ usage of crisis communication strategies (Coombs & Holladay, 2014), namely contingency theory (e.g. Jin & Cameron, 2007) and SCCT (e.g. Coombs, 2007; Coombs and Holladay, 2007). Thereby, research oftentimes focused on fictitious companies and crisis situations (e.g. Dean, 2004; Claeyts & Cauberghe, 2015). This made it difficult to include individuals’ attitudes towards a company in the analysis (Dean, 2004). Several researchers, however, suggest the incorporation of individual variables, such as involvement or emotions when analyzing the impact of crises on corporate reputation (e.g. Choi & Lin, 2009a; Choi & Lin, 2009b; Claeyts & Cauberghe, 2015; Dean, 2004). According to Choi and Lin (2009b), not much is known "about how a potentially affected public will respond to a crisis and how their responses should be incorporated into SCCT when testing that model" (p. 199).

However, there is significance in the comprehension of stakeholder reactions to crises (Härtel, McColl-Kennedy & McDonald, 1998; Kim & Cameron, 2011) because it can be useful knowledge for the organization’s post-crisis communication (Coombs, 2007a). Thus, the aim of the present study is to examine the impact of personal perspectives on the above-explained possible outcomes of a crisis. Through this, the study will draw a connection between the individual and corporate level of the VW emissions scandal.

2.4.1. Crisis-Emotions

As not much research has addressed emotions in crisis so far (McDonald et al., 2010), scholars have begun to investigate the role of emotional responses in the context of such events in recent years (e.g. Choi & Lin, 2009a, 2009b, 2009c; Coombs et al., 2007; Jin, 2009, 2010; Jin, Pang & Cameron, 2012, 2014; Kim & Cameron, 2011). The emotions felt by stakeholders towards an
organization can have an impact on the organization’s development and survival, making the comprehension of affects especially essential (Coombs & Holladay, 2005). As Coombs and Holladay (2005) further posit, crisis communication can more effectively protect an organization’s reputation when it considers the stakeholder’s affective reactions (Coombs & Holladay, 2005) because crisis managers can respond more properly to the incident (Laufer & Coombs, 2006).

As Coombs’ SCCT framework uses an audience-directed approach, it can be applied for the comprehension of stakeholders’ reactions in crises (Jin, 2010). Coombs and Holladay (2005) argue that crises will not only trigger attributions but also create emotional responses among individuals (Coombs & Holladay, 2005). In accordance with AT, anger and sympathy have been stated to be the main emotions in the context of post-crisis communication (Coombs & Holladay, 2005, 2008). Although these two emotions have different valences, sympathy has a positive and anger has a negative valence, they are both probable to be felt by non-victim publics (Jin, 2014). Transferred to the study at hand, this would signify that the general German public could feel emotions about the VW Group and the emissions scandal.

Anger towards an event is mainly felt when people attribute responsibility to certain agents, such as organizations, for a violation or sorrow (Iyer & Oldmeadow, 2006). Lindner (2006) argues that individuals feel anger when they feel hurt and whenever they are treated with disrespect. Transferred to an organization in crisis, it would mean that persons would feel anger towards the organization when they believe that the organization is to be blamed for the event (as cited in Jin, 2010, p. 527). Sympathy on the other hand is evoked through the “awareness of others’ suffering [...] especially when the suffering is seen as undeserved” (Salovey & Rosenhan, 1989; as cited by Iyer & Oldmeadow, 2006, p. 637). This can be explained by the fact that sympathy involves a sense of compassion that is caused by the distress of the other person (Gruen & Mendelsohn, 1986). Iyer and Oldmeadow (2006) indicate, though, that not all people who observe others suffer also feel sympathy. They suggest that sympathy is not only evoked by the feeling for someone else but that it also requires some distance from what is happening. Based on this, it is argued that most probably people who perceive a crisis but are not directly affected by it would tend to feel sympathy (Jin, 2014). In case of an organization experiencing a crisis, it can be assumed that a person would feel sympathy towards the organization when evaluating the organization as victim that is suffering due to the happening. In line with this, several studies found that persons experience different emotions based on the crisis type (e.g. Jin, 2009; Jin et al., 2012).

Being only confronted with stakeholders who feel anger or sympathy towards an organization would not be very significant for organizations in crisis. However, Coombs and
Holladay (2005) argue that emotions will have an impact on a stakeholder’s future organizational interactions, such as supporting the organization (Coombs & Holladay, 2005), and are therefore crucial to consider. Furthermore, Liu, Austin and Jin (2011) explain that certain emotions have been related to undesirable crisis outcomes. In the most current SCCT model, emotion is incorporated as a predictor for behavioral intentions but not for reputation (see figure 1, arrow E) (Coombs, 2007a; Choi & Lin, 2009b). Jin, Pang and Cameron (2007) argue, though, that emotions in a crisis can have an impact on people’s opinion about an organization. Choi and Lin (2009b) thus proposed and tested a revised model that contained such a direct path from emotions to reputation. They found that anger significantly predicted the company’s perceived reputation: A higher level of anger led to a worse reputation. This highlights the significance of emotions in SCCT and the need to take emotional reactions into account when aiming to protect an organization’s reputation (Choi & Li, 2009b). Based on their findings, Choi and Li (2009b) suggest a revised SCCT model that contains a direct link from anger to reputation.

On the contrary, only few studies in crisis research have centered on the impact of positive emotions, although the significance of positive affects in communication has been apparent (Jin, 2014). For instance, Folkman and Moskowitz (2000) claim that positive emotions can emerge together with distress in a stressful situation. As for the relationship of sympathy and post-crisis reputation, it can be assumed that persons who feel sympathetic for an organization have a positive attitude and thus rate the organization’s reputation better than those who do not feel sympathy for the organization. Based on this background, the following hypotheses can be formulated:

**H1:** Anger has a negative impact on the VW Group’s post-crisis reputation.

**H2:** Sympathy has a positive impact on the VW Group’s post crisis reputation.

Although being considered as a predictor for behavioral intentions in SCCT (Choi & Lin, 2009b; Coombs, 2007a), potential effects of crisis emotions on behavior have not much been investigated, yet (Coombs & Holladay, 2005). Such research would help, though, “to develop effective crisis management strategies” (McDonald et al., 2011, p. 333). One possible negative behavioral intention that is triggered by emotions is that of NWOM (Coombs & Holladay, 2007; Coombs, 2007a, 2014).

As Lerner and Tiedens (2006) explain, several studies have confirmed that angry people believe that they have the ability to make an impact on or manage a certain situation and trigger a behavior. In line with this, anger has been found to lead to NWOM intention because people want to express their feelings or want to avenge (Wetzer, Zeelenberg & Pieters, 2007). Coombs
et al. (2007) posit that unhappy customers have a higher proclivity to tell close persons about products and services than those who are happy. The authors further argue that stakeholders who are angry because of a crisis are less likely to use positive WOM but more likely to use NWOM instead. The authors call this the "negative communication dynamic" (Coombs et al., 2007). However, in their study about the relationship between crisis responsibility, anger and WOM, both responsibility and anger were found to increase positive WOM instead of NWOM. Coombs et al. (2007) conclude that the moderate level of anger towards the crisis in their study may not have been sufficient to develop their proposed negative communication dynamic. They suggest examining the impact of anger in future studies. Other studies, though, have found evidence for the relationship between anger and NWOM. For instance, Utz et al.’s (2013) study revealed that anger had an impact on secondary crisis communication, such as NWOM. Moreover, the higher the level of negative emotions, the least the persons had behavioral intentions that were supportive for an organization and the more they tended to use NWOM (McDonald et al., 2010). McDonald et al. (2010) even found that anger was one of the strongest predictors for the intention to use NWOM.

Sympathy, on the other hand, could not play such an important role in a crisis because its positive affect might not influence stakeholders to a large extent (Coombs & Holladay, 2005). Results of a study by Stockmyer (1996) reveal for instance that sympathy towards an affected company did not influence people to purchase from it after the crisis. Coombs and Holladay (2005) suppose, "customers are more likely to complain about a bad experience with a product or service than report a positive experience" (p. 275). Moreover, the scholars argue that sympathy might result in supporting actions by stakeholders (Coombs & Holladay, 2005). Further research is necessary, though, in order to assess the actual benefits of sympathy for crisis communication (Coombs & Holladay, 2005). Thus, it can be argued that sympathy towards the corporation would not lead to NWOM and a higher level of sympathy would decrease the NWOM intention. Hence, the following can be hypothesized:

**H3:** Anger increases the intention for negative word-of-mouth about the VW Group.

**H4:** Sympathy decreases the intention for negative word-of-mouth about the VW Group.

### 2.4.2. Crisis Responsibility

In order to shield an organization from a crisis, understanding about how the incident causes damage to the organization is needed (Coombs, 2015). Previous research has recognized four situational factors that support the comprehension of the harmful impact of a crisis, one of them crisis responsibility (Coombs, 2015). Since it is an essential concept for understanding "stakeholders’ reactions to crisis responses" (Brown & Ki, 2013, p. 2) and takes on a pivotal part
Crisis responsibility refers to the amount of responsibility for a crisis that stakeholders attribute to an organization (Coombs, 1998, 2004), also called the blame of the organization (Coombs, 1998). As explained in chapter 2.1.1, the construct is derived from AT (Coombs, 2015), in which causal attributions play a pivotal role (Weiner, 1985). Responsibility can either be attributed to the person or organization embroiled in the crisis event (internal) or circumstantial (external) factors (Coombs, 2010). The attribution of internal or external responsibility is essential in inducing affective reactions or behaviors to the actors that are part of the crisis (Weiner, 1986). In the case of a high degree of internal responsibility, behavioral reactions are negative. On the other hand, if the external responsibility is perceived to be high, behavioral reactions are positive (Weiner, 2006). The process of blaming is based on the knowledge that a person possesses about whether an organization is responsible for a crisis and whether it could have controlled or avoided the crisis (Jin, 2010).

As explained in chapter 2.1.1, based on the crisis type, managers are able to detect whether stakeholders tend to consider the organization as responsible for the crisis or not (Coombs, 2015). The VW emissions scandal falls into the category of a preventable crisis, thus, a high attribution of crisis responsibility the VW Group is expected (Coombs, 2007a). The emphasizing of certain aspects of a crisis, therefore framing it in a certain way, can influence a person’s opinion (Coombs, 2007a; Druckman, 2001) and on how stakeholders evaluate the crisis (Coombs & Holladay, 2002). For instance, existing research in the field of crisis communication has found a direct link between crisis responsibility and reputation (e.g. Coombs, 2004, 2007a, 2014, 2015; Coombs & Holladay, 1996; 2002; Lacznia, 2001; Turk et al., 2012) and behavioral reactions (Coombs, 2007a), such as purchase intention (Laufer & Coombs, 2006) and NWOM intention (Coombs, 2015).

Furthermore, as people ascribe responsibility for an event, they will experience various common emotions (Weiner, 1985; Coombs, 2007a). Main emotions in AT are anger and sympathy (Coombs, 2007a). In line with AT, Coombs and Holladay (2005) posit that “[c]risis responsibility should be related to the affect created by a crisis” (p. 269). The SCCT contains the so-called ‘Crisis Responsibility–Affect Proposition’ (see figure 1, arrow C), which indicates that a stronger association of crisis responsibility has a positive impact on the feelings of anger whereas a lower association of crisis responsibility has a positive impact on sympathy (Coombs, 2007a; Coombs & Holladay, 2005). The more responsibility a stakeholder attributes to an organization, the greater the risk of the crisis (Coombs, 2014).

Previous studies have demonstrated the occurrence of certain emotions due to stakeholders’ attributions of crisis responsibility (Utz et al., 2013). Several studies found that
persons experience different emotions based on the crisis type (e.g. Jin, 2009; Jin et al., 2012). Thereby, intentional crises create the strongest anger due to the high level of crisis responsibility (e.g. Coombs & Holladay, 2005). In accordance with this, Choi and Lin (2009b, 2009c) found that anger was the most and sympathy the least occurring emotion after a product recall crisis. Results of Choi and Lin (2009b) further revealed that crisis responsibility significantly predicted emotions such as anger, surprise or fear, whereas anger had the strongest relation to responsibility. However, they could not prove an association of responsibility with sympathy. This result could be due to the small sample size of sympathy (n=2) in the content analysis, though, which may have led to insignificant results (Choi & Lin, 2009b). In line with this, Coombs and Holladay (2005) found that crisis responsibility was strongly positively correlated with anger. The authors also found though, that crisis responsibility is strongly negatively correlated with sympathy. Based on this, McDonald et al. (2010) propose that a stronger crisis responsibility prognosticates stronger emotions. Thus, when a person or organization is judged responsible, anger is experienced and behavioral actions are negative. On the other hand, when a person or organization is not judged as responsible, sympathy is evoked and actions are positive (Kiambi & Shafer, 2015; Weiner, 1985; Weiner, 2006, as cited in Coombs, 2007a). Based on these assumptions and empirical results, the following can be hypothethized:

**H5:** A higher level of perceived crisis responsibility leads to more anger towards the VW Group.

**H6:** A higher level of perceived crisis responsibility leads to less sympathy towards the VW Group.

### 2.4.3. Crisis Involvement

Despite the call for including the concept of stakeholder involvement into crisis communication research (e.g. Dean, 2004; Coombs & Holladay, 2005; McDonald & Härtel, 2000) only few studies have investigated the meaning of the concept in this context (Choi & Lin, 2009a). As a result of the novelty of involvement in crisis communication, studies that did incorporate the concept did not consider it in the same manner. This makes the comparison and generalization of results difficult. For instance, while some scholars included product involvement (e.g. Choi & Lin, 2009a; Choi & Chung, 2013), other applied crisis involvement (e.g. McDonald et al., 2010). Since the emissions scandal and not the products of the VW Group are of interest of this study, the involvement with the crisis and its consequences are examined.

As many researchers consider personal importance (Petty & Cacioppo, 1981) or relevance as the crucial aspect of involvement (e.g. Celsi & Olson, 1988; Zaichkowsky, 1985), the
concept can generally be defined as "a person’s perceived relevance of the object based on inherent needs, values and interests (Zaichkowsky, 1985). Thus, the level of perceived personal relevance defines how much a consumer is involved "with an object, situation or action" (Celsi & Olson, 1988, p. 211). Celsi and Olson (1988) imply that something is of personal relevance when consumers regard it as self-related or somehow crucial for accomplishing individual aims and values. Generally, the concept of involvement is used in the context of products or brands (Peter & Olson, 1990, as cited in McDonald & Härtel, 2000, p. 801; Zaichkowsky, 1985), however, consumers could also be involved with various issues, such as events (Peter & Olson, 1990, as cited in McDonald & Härtel, 2000, p. 801; Petty & Cacioppo, 1986).

In the case of an individual’s subjective sense of personal relevance, it can be referred to “felt involvement” (Celsi & Olson, 1988). It is a perception that is tied to an object or event and solely exists at particular times and situations, which emphasizes the situational role of the concept (Celsi & Olson, 1988). According to Celsi and Olson (1988), felt involvement has motivational characteristics, which have an impact on cognitive processes, including attention and comprehension, and on behavior, such as consumption behavior. As Petty and Cacioppo (1981, 1986) argue, involvement has an influence on people’s motivation for message processing and thus on their attitude change. While highly involved consumer process information on the central route, meaning they pay more attention to the quality of the arguments, low-involved consumers process it on the peripheral route and will rather pay attention to aspects such as the source credibility of the message. Thus, the higher a person’s involvement, the more difficult it is to change their attitude.

Research in the field of public relations (Heath & Douglas, 1990, 1991, as cited in Choi & Chung, 2013) has highlighted the crucial role of involvement regarding audience’s receptivity to information and issues. The concept of involvement was first applied to the field of crisis communication and to organizational crises by McDonald and Härtel (2000) (Choi & Lin, 2009a) because they assumed that personal relevance is important for the determination of crisis outcomes (McDonald & Härtel, 2000). According to the authors (2000), most of the existing crisis communication research applies AT in order to prove connections between attributions and anger as well as purchase intention. Although AT views the evaluation of individual relevance of an event as critical, it does not integrate it into the model. Thus, the scholars suggest considering Affective Events Theory (AET) (Weiss & Cropanzano, 1996) in order to examine the role of both personal relevance as well as emotions in crisis. More precisely, AET suggests that the level of personal relevance defines the intensity of felt emotions (McDonald & Härtel, 2000).
Applying involvement to crisis events, McDonald and Härtel (2000) argue that the concept defines whether a person is aware of a message and how much attention he or she pays to it. In the case of a company crisis, a person’s intrinsic sources of personal relevance, such as its goals, values or needs, but also changeable situational sources of personal relevance in the consumer’s environment, including the media coverage of such event, determine his or her motivation to devote herself or himself to a message. The level of felt involvement would then influence the processes of attribution and emotion, which would in turn have an impact on behavior intentions after a crisis (McDonald & Härtel, 2000; Choi & Lin, 2009a). According to Weiner (1995), events that are more personally relevant lead to stronger emotions. Thus, McDonald and Härtel (2000) argue that involvement is an important factor in defining the effects of a company crisis because it can influence the level of people’s attention to a message and thus the efficiency of crisis communication. More precisely, the scholars propose that a consumer’s involvement with a company crisis predicts the level of emotions. As felt involvement influences consumer’s anger, McDonald and Härtel (2000) propose that the level of felt involvement defines the intensity of anger they feel in a company crisis. Furthermore, since crisis variables are considered to be “dynamic and changeable” (McDonald & Härtel, 2000, p. 801), felt involvement is temporary. Thus, as anger is assumed to result from felt involvement, it is also momentary. This indicates that anger will disappear as time passes, except for in “high impact crises that generate extremely high levels of anger” (Coombs & Holladay, 2007, p. 302). Based on this, Coombs and Holladay (2005) suppose that consumer involvement could increase the emotions and/or crisis responsibility that were created in a crisis, which could lead to an extension of SCCT.

Following McDonald and Härtel’s (2000) introduction of involvement to the field of crisis communication, several researchers (e.g. Choi & Chung, 2013; Choi & Lin, 2009a; McDonald et al., 2010) have applied the concept of product involvement, meaning a person’s perception of relevance regarding a product (Choi & Chung, 2013), to crisis communication. Choi and Chung (2013), for instance, found that involvement had a significant effect on reputation. A study on crisis involvement, conducted by McDonald et al. (2010), revealed that involvement and responsibility caused both positive and negative crisis emotions. The strongest effects were found for anger, fear and sympathy. In comparison with responsibility, though, crisis involvement was only a weak predictor for emotions (McDonald et al., 2010). In line with this, Choi and Lin (2009a) found in their study that high and low involved consumers perceive a crisis differently and found a link between product involvement and anger for the Mattel product crisis. The authors conclude that the inclusion of consumer involvement into the SCCT is a “logical next step for future research in crisis communication” (p. 21).
Based on Choi and Chung’s (2013) argumentation for the Toyota recall case, for the VW emissions scandal, it can be assumed that there are specific groups of people (e.g. current owners of a car of the VW Group or owners of an affected car) who are likely to regard the VW emissions scandal as personally relevant. Thus, it can be expected that they have a higher level of felt involvement with the VW emissions scandal than those who are not owners of such cars. Based on the above explained theoretical assumptions and empirical findings, it can further be assumed that people with a higher level of crisis involvement will feel more anger and sympathy towards the VW Group after the crisis. Consequently, the following hypothesis can be proposed:

**H7**: A higher level of involvement with the VW emissions scandal leads to a higher level of anger after the crisis.

**H8**: A higher level of involvement with the VW emissions scandal leads to a lower level of sympathy after the crisis.

### 2.4.4. Person-Company Fit

As Bhattacharya and Sen (2003) state, an increasing number of companies seek to achieve significant and enduring relationships with their customers because they may bring several corporate benefits. Such benefits include customer loyalty (Bhattacharya & Sen, 2003; Lichtenstein, Drumwright & Braig, 2004), emotionally attached customers (Lichtenstein et al, 2004), the usage of positive WOM (Bhattacharya & Sen, 2003), better evaluations of and attitudes towards the company (Einwiller et al, 2006; Sen & Bhattacharya, 2001) as well as commitment with the company (Kim, Lee, Lee & Kim, 2010). Several of these studies have applied the concept of consumer-company identification to the relationship between consumers and a company (e.g. Lichtenstein et al., 2004; Bhattacharya & Sen, 2003) because it is beneficial for explaining people’s causes and motives for associating with companies (Pérez, 2009; Du, Bhattacharya & Sen, 2007; Marín & Ruiz, 2007). Other studies examined the relationship between employees and their company, (e.g. Berger, Cunningham & Drumwright, 2006; Kim et al., 2010), customers and brands (e.g. Underwood, Bond, & Baer, 2001) or alumni and their former college (e.g. Mael & Ashforth, 1992). Many of these studies applied Social Identity Theory (SIT) to explain such identification processes (e.g. Ashforth & Mael, 1989; Bhattacharya & Sen, 2003; Dutton, Dukerich & Harquail, 1994; Kim et al., 2010; Mael & Ashforth, 1992; Pérez, 2009) as well as the concept of organizational identification (Ashforth & Mael, 1989; Bhattacharya & Sen, 2003).

SIT refers to a social-psychological theory that was mainly established by Tajfel and Turner (e.g. Tajfel, 1974; Tajfel & Tuner, 1985) (Ashforth & Mael, 1989). The theory postulates that people are likely to categorize themselves into social groups, such as gender or religious
groups (Ashforth & Mael. 1989; Tajfel & Turner, 1985) because it enables them „to situate themselves in their social environment“ (Pérez, 2009, p. 179). Social identification thereby refers to „the perception of oneness with or belongingness to a group, involving direct or vicarious experience of its successes and failures“ (Ashforth & Mae, 1989, p. 34).

Ashforth and Mael (1989) transferred the concept of social identification to an organizational context and argue that organizational identification is a particular type of social identification. The organization thereby functions as a social category that might “fulfill [...] motives for the individual” (Ashforth & Mael, 1989, p. 22) and that the individual uses to build up self-confidence (Ashforth & Mael, 1989). Du et al. (2007) argue that the consumer-company identification is a psychological attachment with the company that drives behaviors, which are favorable to the company (Du et al., 2007; Pérez, 2009). SIT postulates that individuals who identify themselves with a company are more likely to judge the company positively in order to increase and enhance their self-concept (Tajfel & Turner, 1979; as cited in Péres, 2009). A consumer that identifies him- or herself with a company has a mental connection with it (Dutton et al., 1994; Bhattacharya & Sen, 2003) and will then adjust his actions to the company’s aims and interests (Mael & Ashforth, 1992). Thus, Ashforth and Mael (1989) assume that a higher level of identification increases “support for and commitment to” the company as well as „loyalty to, and pride in, the [company] and its activities“ (p. 26). People who have a strong identification with an organization behave in a way that is coherent with the organization’s „values, beliefs and culture“ (Xiao & Hwan (Mark) Lee, 2014, p. 1242). Moreover, the identity with a company is related to values or emotions that the individual experiences for being part of a group. When the individual evaluates his identity to be equal to that of the group, he can easily connect to it, indicating that emotional identification tends to be created or improved. If consumers strongly identify themselves with a company, they will become supportive towards the organization. They will not only show loyalty to the company but will also show enthusiasm about company activities (Chu & Li, 2012).

According to Dutton et al. (1994), organizational identification takes place based on the individual’s perception of organizational attributes or perceived identity. Thereby, the individual’s identification is dependent on how attractive he or she evaluates the organization (Dutton et al., 1994). It is argued that corporate reputation positively influences the emergence of customer identification because a company may be perceived as more attractive (Bhattacharya & Sen, 2003; Dutton et al., 1994; Keh & Xie, 2009). Keh and Xie (2009) give two reasons for this: Firstly, well-reputed companies have a tendency for “superior financial profitability, products or services, and frequent media coverage, which subsequently enhance their relative advantage and distinctive identity in the marketplace, which in turn contribute to their identity attractiveness” (Keh & Xie, 2009). Secondly, a good reputation stands for high
prestige, meaning that the organization is regarded in a positive way (Bergami & Bagozzi, 2000). In their study, Keh and Xie (2009) found that corporate reputation positively influenced customer identification. Based on previous definitions, organizational identification is in this context referred to as the degree to which a person feels connected to the organization and defines him-/herself with the organization (Bhattacharya & Sen, 2003; Ashforth & Mael, 1989; Xiao & Hwan (Mark) Lee, 2014).

Social identification „with a collectivity“ can even emerge in the case that no interpersonal connection or interaction exists and can still have a strong effect on emotion and behavior (Ashforth & Mael, 1989, p. 26). Based on this, it can be argued that customers of cars of the VW Group but also non-customers can feel certain identification with the corporation. This would signify that Germans as a whole could develop some sort of identification with the corporation. According to Ashforth and Mael (1989), the identification with a group can even endure when “group failure is likely” (p. 35). Transferred to an organization, a failure could be for instance a crisis. Therefore, it can be expected that even after the emissions scandal, the identification with the corporation would remain high. However, Berger et al. (2006) argue that changed behaviors of members of an organization can result in changed beliefs and identification.

For the German population, which evaluated the reputation of the VW Group especially high, it can be assumed that the identification with the corporation is high. As mentioned above, the identification with a brand or an organization has resulted in positive and more supportive outcomes, including positive emotional responses. Based on these findings, it can be expected that a higher identification with the VW Group results in such positive outcomes, meaning that the person-company fit influences the way people feel about the VW Group. Due to this supportive manner, it can be expected that person-company fit weakens the relationships of involvement and responsibility and anger as well as enhances the relationships of involvement and responsibility with sympathy. This would for instance indicate that persons who perceive a high responsibility for the crisis may tend to express less anger when their person-company fit is high, compared to those who identify with the company less. Thus, the following hypothesis can be stated:

**H9:** A higher person-company fit weakens the relationship between perceived crisis responsibility and anger.

**H10:** A higher person-company fit intensifies the relationship between perceived crisis responsibility and sympathy.

**H11:** A higher person-company fit weakens the relationship between crisis involvement and anger.
**H12:** A higher person-company fit intensifies the relationship between crisis involvement and sympathy.

### 2.5. Conceptual Model

In summary, in this chapter, twelve hypotheses were formulated based on theoretical and empirical knowledge. Figure two illustrates the conceptual model of the present study, which provides a visual overview of all hypotheses. Thereby, the two emotions anger and sympathy take on a mediating role in the relationship between crisis responsibility and crisis involvement with post-crisis reputation and NWOM. Moreover, the moderating function of person-company fit in the relationships between crisis responsibility and crisis involvement with the two emotions is portrayed.

*Figure 2: Conceptual Model*
3. Methodology

The third chapter states and explains the methodology that was applied in order to test the above-explained conceptual model. It thus provides the rationale for the decisions made regarding the research design, data collection, sampling method as well as the operationalization of the theoretical concepts that are relevant for this study.

3.1. Choice of Method

In order to answer the research question underlying this study, the decision for a quantitative methodology was taken. As Babbie (2011) points out, quantitative research methods often use a deductive approach, implying that the researcher formulates several expectations that are based on theory. These are then tested in order to find out whether they actually occur (Babbie, 2011; Zhou & Sloan, 2009). Besides testing such hypotheses, quantitative research methods enable the investigation of relations between variables (Punch, 2014). Additionally, such research methods permit not only generalizations but also the prediction of certain effects (Zhou & Sloan, 2009).

As the aim of the present study is to test relationships between theoretical concepts, a quantitative methodology was the best option for this study.

More precisely, a quantitative online survey was conducted. One aim of quantitative surveys is to make statements about specific persons that are relevant to a research (Brosius, Haas & Koschel, 2012). Furthermore, a survey is often used to ask for the behavior, attitudes, expectations and characteristics of people and it allows the self-classification of the participants (Neuman, 2014). As explained above, this study is interested in personal perspectives, which are all latent variables. According to Theo, Ting Tsai & Yang (2013), latent variables are unobservable and “cannot be measured directly” (p. 4). Thus, they must be defined by indicators, which are for instance measured by self-reported responses on an attitude scale (Byrne, 2013). Hence, a survey is an appropriate research method for this study.

An online survey is a special type of a survey, which has several advantages that are relevant for this study. First of all, the method is inexpensive, fast and location-independent. Furthermore, the dropout rate and the response time are captured. Besides, this method provides anonymity and is suitable for sensible topics, such as personality (Möhring & Schlütz, 2010). An online survey also enables the randomization of items, which can prevent the occurrence of sequence effects (Scholl, 2009). Lastly, 77.6 percent of the German population are internet users (Statista, 2016), making this method suitable for reaching a large part of Germans. However, besides these advantages, the method also has several disadvantages that need to be considered. The most important disadvantage is the self-selection of the respondents, which
oftentimes leads to a low response rate (Möhring & Schlütz, 2010). The respondents decide on their own whether they want to participate in the survey or not. This makes the drawing of a random and representative sample barely possible (Punch, 2014; Scholl, 2009). Nevertheless, due to the majority of advantages, the application of this method is suitable.

Lastly, the choice for this specific methodology can be supported by the demand for quantitative survey methods in crisis communication research. Over the past years, research in the field of crisis communication has increased rapidly (Kim & Cameron, 2011) but existing research has mostly used case study methods (Coombs & Holladay, 2008; Kiambi & Shafer, 2015). Although case studies provide valuable descriptive data (Coombs & Holladay, 2008), they oftentimes offer little theoretical understanding of crisis communication (Dean, 2004) and are hard to generalize (Carroll, 2009). According to Rousseau (2006), a change to evidence-based management in crisis communication is necessary, though, in order to base managerial decisions on scientific evidence. Over the last decade, research in the field has started to apply experimental design methods (Kiambi & Shafer, 2015), meeting the call for quantitative research (Dawar & Pillutla, 2000; Dean, 2004). However, most experiments focused on fictitious organizations and/or crises (e.g. Claeyts & Cauberghe, 2015; Dean, 2004; Kiambi & Shafer, 2015). This leads may have lead to the problem of artificiality by creating a favorable reputation through only one exposure (Lyon & Cameron, 2004) and may have had an impact on the results of such studies (Kiambi & Shafer, 2015). In their review of crisis communication research, Johnson Avery, Weaver Lariscy, Kim and Hocke (2010) imply to use survey methods in order to improve the methodological diversity in the field. The present study thus contributes to existing research by applying a quantitative survey method that examines a real crisis of a non-fictive corporation. By using a quantitative survey method and including individual perspectives, it further draws a connection between the individual and the corporate level in a crisis.

3.2. Sample and Sampling Method

As aforementioned, this research’s target population comprises the German public. As this population is very large, it is expensive and difficult "to collect information from everyone in the group" (de Vaus, 1996, p. 60). Therefore, a sample of the population was obtained.

As one of the sampling method, the purposive sampling was chosen. Purposive sampling is a form of non-probability sampling in which the researcher decides, based on selection criteria, which person is suitable for the sample (Babbie, 2011; Walliman, 2006). Although this sampling method does not ensure representativeness, useful information can still be supplied (de Vaus, 1996). Additionally, since a specific target audience has been identified for this study (i.e. the German public), this sampling method seems plausible. Besides, the snowball sampling
method was applied. Snowball sampling refers to a sampling technique where further participants are reached through other respondents (Babbie, 2011) by forwarding it to their relatives and friends (Zhou & Sloan, 2011). Although this sampling method has several disadvantages, such as not enabling to gain a representative sample and thus making generalizations impossible (Brosius et al., 2012), it is suitable. This is mainly for the reason that it enables to reach a large number of participants within a short amount of time (Möhring & Schlütz, 2010). Lastly, the convenience sampling method was applied. This sampling method refers to using those persons as participants who are instantly accessible (Walliman, 2006). Thus, it enables the reaching of a large amount of people and is thus appropriate for this study.

Due to the online nature of the survey, the participants were recruited online. First of all, emails were sent to secretaries of German universities asking to forward the survey to their students through internal mailing lists. Additionally, the link was posted in several different German Facebook groups, such as “Duitse en Nederland – Deutsche in Holland” (engl. “Germans in the Netherlands”), “VW Abgas Skandal Motor EA 189” (engl.: “VW emissions scandal engine EA 189”) or “Ich halte zu Volkswagen, egal was passiert” (engl. “I will stand by Volkswagen, no matter what happens”). Lastly, the link to the survey was shared on the researcher’s own Facebook wall and sent to her own personal network via E-Mail and messages. All potential participants received the link together with a short text asking for the participation in the study and a request to forward the link to the survey to their peer group. This approach allowed to reach a population that is beyond the researcher’s own personal network.

3.3. Data Analysis
In order to test the hypotheses in Chapter 4, structural equation modeling (SEM) is applied. For this purpose, the two software IBM SPSS Statistics 22 and the SPSS related software Amos are used. SEM refers to a collection of statistical analysis methodologies that are used to test hypotheses about the direct and indirect relations between variables (Byrne, 2013; Hoyle, 1995, as cited in Theo et al., 2013; In’nami & Koizumi, 2013; Raykov & Marcoulides, 2000). The hypothesized model is based on theory and is tested in one simultaneous analysis containing all proposed variables. Depending on the fit of the model, the a priori postulated relationships among the variables can be supported or rejected (Byrne, 2013; Raykov & Marcoulides, 2000). The variables in the SEM can be both observed variables, also called indicators, as well as latent variables (Theo et al., 2013). In comparison to other multivariate techniques, SEM has several advantages. First, due to its confirmatory approach, it enables the testing of hypotheses. Second, SEM takes into account specific estimates of error variance parameters and is thus more accurate than other methods. Third, SEM considers both observed and latent variables. It
investigates the relationships between the two kinds of variables but also the relations among different latent variables (Byrne, 2013; In’nami & Koizumi, 2013; Nachtigall, Kroehne, Funke & Steyer, 2003). In fact, SEM was even developed to analyze the relationships between latent variables (Nachtigall et al., 2003). Lastly, no easily applicable alternative methods are existent that pose multivariate relations or estimate indirect effects through a mediating variable (Byrne, 2013; In’nami & Koizumi, 2013; Nachtigall et al., 2003).

Based on these characteristics, it can be argued that SEM is a suitable set of methodologies for this thesis. First of all, this study aims to analyze the relationships between latent variables, such as involvement, anger or reputation, which were measured by several indicators (see chapter 3.5). In addition, the conceptual model and the hypotheses that are underlying this research and will be tested (see chapter 2) are derived from theory. Finally, SEM enables the estimation of the indirect effects of the mediating variables anger and sympathy in the proposed conceptual model.

3.3.1. Pre-Test, Data Cleaning and Preparation for the Data Analysis

The online survey questionnaire for this research was conducted using Qualtrics. Before the actual survey was initiated, the quality and functionality of the research instrument was tested in a pretest (Möhring & Schlütz, 2010; Zhou & Sloan, 2009). For the purpose of this test, three persons received the link to the questionnaire and three persons received it as a digital text document or a printed questionnaire. Through this, valuable feedback on the comprehension of the questions and suggestions for improvement were gained. Most importantly, questions were even further adjusted to the VW Group and the emissions scandal and some items were eliminated from the questionnaire of the actual survey.

The data collection took place between 3 and 19 April 2016. In this time period, a total of 2072 people participated in the survey. Of these participants, 1510 finished the questionnaire, making the response rate 72.91 percent and thus quite high. However, this sample included 30 respondents who were not of German nationality (e.g. Turkish, Russian or Italian) and thus had to be excluded, as they did not fit into the target population. Additionally, respondents that were identified to have given wrong answers, such as an age of “00” or “0” were excluded from the sample. Lastly, one person who needed less than two minutes to complete the whole survey was excluded because it can be assumed that he/she did not answer the questions in an elaborate way. This leads to a final sample of 1475 cases, which were included in the analysis.

Furthermore, as part of the data cleaning process, some items that were reverse-coded had to be recoded. Through this, an easier interpretation of the data and its usage for the analysis was enabled. An example item from the reputation scale, where a higher agreement of
an item refers to a higher reputation, is “The VW Group is basically dishonest concerning the emissions scandal”. Finally, open answers for education and nationality were examined and if necessary added to the right variables. This was for instance the case for persons who openly answered that they had obtained a high school diploma.

In order to apply SEM the data needs to comply with several assumptions (Kline, 1998). First of all, the dataset should not contain any missing data (Kline, 1998). As only respondents who finished the whole questionnaire were maintained in the dataset, this was not the case and the first premise met. Second, no multicollinearity, meaning no strong intercorrelations between variables, should occur (Kline, 1998). For this purpose, correlations between all 37 variables of this study were calculated. Most of the correlations are significant but weak or moderate. However, also some significant strong correlations could be detected, especially among variables of the concepts person-company fit and involvement. All of these values are below .8, though, and the correlations are only within concepts and not between different concepts. Thus, all variables were maintained in the dataset but the strong correlations were kept in mind for the data analysis (for all correlation matrices, see Appendix C). According to the third premise, the data should not contain any multivariate outliers. This assumption is also fulfilled, as outliers have already been deleted in the data cleaning process. Next, the dataset was examined in terms of linearity and homoscedasticity but no deviations were detected and this premise is also accepted. Last, the data was investigated regarding its normality. Despite the fact that “maximum likelihood methods are robust against non-normality, it is still important to assess whether the data satisfy the assumption of normality” (In’Nami & Koizumi, 2013, p. 34). For this purpose, the skewness and kurtosis of the data can be tested (In’Nami & Koizumi, 2013). If these values are zero, “data normality is ensured” (In’Nami & Koizumi, 2013, p. 34). In literature, there is no consensus about which level of non-normality is acceptable (In’Nami & Koizumi, 2013), however, West, Finch and Curran (1995) suggest that the values for skewness and kurtosis should not exceed 2 and 7. For the present study, these limit values are used. The test for skewness and kurtosis revealed that no variables showed any deviations from the desired values except for two variables of the concept person-company fit. Thereby, the two variables “When someone criticizes the VW Group, it feels like a personal insult” and “The successes of the VW Group are my successes” showed abnormalities regarding their skewness values (skewness_{insult}=2.138; skewness_{successes}=2.016). Thus, these two variables are excluded from the dataset in order to assume the premise of normality for all concepts.
3.4. Respondents

Of the 1475 respondents that were included in the data analysis, 44.9% are female (N=662) and 55.1% male (N=813). Further, the respondents are between 17 and 70 years old. However, the mean age is 25.48 (SD=7.09) and the median is only 24. Regarding the educational level of the participants, it can be noticed that they are rather highly educated. Only .3% (N=5) do not have any kind of high school diploma, .5% (N=7) stated to have gained the lowest high school diploma ("Hauptschulabschluss") and further 4.1% (N=60) have obtained the middle level high school diploma ("Realschulabschluss"). Most of the respondents, however, claimed to have the highest high school diploma ("Abitur"/"(Fach-) Hochschulreife") (60.3%, N=889) and further 34.1% have already obtained a university degree (N=503). In addition to this, three of the respondents have already finished their PhD. Lastly, seven respondents (.5%) made an open answer for their education, which was a statement about their current occupation and made it impossible to clearly identify their highest education level.

Besides this demographic information, the questionnaire asked whether the respondents owned at least one car of the brands VW, Audi, Seat, Skoda or Porsche, which were affected by the emissions scandal. 50.8% (N=749) of the participants indicated to currently own a car of such brands. Of these 749 respondents, the majority does not own an affected car (73.7%, N=552) and only 21.8% stated to own an affected car (N=163). Further 4.5% (N=34) claimed to not know whether their car was affected by the emission scandal or not.

3.5. Operationalization and Measurements

In this subchapter, the operationalization of the theoretical concepts will be presented. Additionally, descriptive statistics of the theoretical concepts will be provided as well as measurement models deployed and tested. In the context of a survey, operationalization refers to the transformation of the overall research question into specific test-questions that can be asked in the actual questionnaire. For this, the meaning and the content of the relevant constructs have to be explored (Möhring & Schlütz, 2010). For the purpose of this study, already existing and previously tested measurements were used and adjusted to the topic at hand, meaning that they were adapted to the VW Group and the emissions scandal. Since the survey was directed at the German public, the questionnaire was generated in German. Thus, measures that were originally constructed in English language were translated into German. For this process, existing German translations were used as well as the back-translation method applied. In addition, when formulating the questionnaire, the usage of the term "crisis" was avoided, as it is negatively connotated (Doorley & Garcia, 2007). Instead, it was referred to the "VW emissions scandal". For the full questionnaires in English and German, see Appendix A and for the
overview of all items, see Appendix B.

3.5.1. Post-crisis reputation

The dependent variable post-crisis reputation was measured using the five-item version of the ten-item Organizational Reputation Scale (Coombs & Holladay, 1996, 2002; Coombs, 2004). This scale was originally adapted from McCroskey’s (1966) Character subscale for measuring ethos (Coombs & Holladay, 2002). The shorter five-item scale had a high Cronbach’s alpha value of \( \alpha = .87 \) (Coombs & Holladay, 2002) and of \( \alpha = .81 \) (Coombs, 2004) in previous studies and was thus appropriate to apply. In the present study, the scale was measured using a seven-point Likert scale with verbalized endpoints (1 = strongly disagree, 7 = strongly agree).

Before the measurement model of the post-crisis reputation was deployed and tested, an exploratory factor analysis (EFA) was conducted in order to explore, whether the concept only consists of the proposed one dimension. As the Kaiser-Meyer-Olkin (KMO) measure had a value of .706 and the Bartlett’s test for Sphericity was significant, it was appropriate to conduct the factor analysis. To all EFA’s deployed in this study, the maximum likelihood factoring with a Varimax rotation was applied. This is firstly because the Amos software uses the Maximum Likelihood estimation method (Theo et al., 2013) and secondly because this particular method is especially suitable for large samples (Weiber & Mühlhaus, 2014), as it is the case in this study. According to the Kaiser criterion of the EFA of post-crisis reputation, the extraction of only one factor is proposed, confirming the theoretical assumption of one single reputation dimension. Furthermore, all five items have a sufficient factor loading (see Appendix C).

Next, the measurement model of the post-crisis reputation is tested using the Confirmatory Factor Analysis (CFA) in Amos. Having 5 degrees of freedom, the model is over-identified and can thus be tested. However, the significant Chi-Square test indicates the rejection of the model \( (\chi^2(5)=681.385; p=0.000) \). It has to be noted, though, that the Chi-Square test becomes easily significant for large samples (Theo, Ting Tsai & Yang, 2013). Therefore, the Chi-Square value should be seen in relation to the degrees of freedom, which results in a measure that should not exceed a value of 2.5 (Weiber & Mühlhaus, 2014). In the present case, the value is exceeded by far \( (\chi^2/df=136,277) \) and also other model fit indices do not offer an acceptable model fit\(^2\) \( (GFI=.837; NFI=.738; CFI=.739; RMSEA=.303) \). Thus, a modification of the measurement model was implied. In order to gain a better model fit, co-variances between the error terms of the items within this construct were allowed and the model with the best fit

\(^2\) For the RMSEA, values of \( \leq .08 \) signify an acceptable and values of \( \leq .05 \) signify a good model fit (Browne & Cudek, 1993). For the GFI and CFI, values of \( \geq .90 \) signify an acceptable and values of \( \geq .95 \) a good model fit (Weiber & Mühlhaus, 2014). The same is the case for NFI (Bentler, 1992).
indices was then selected. For this model modification, the proposed modification indices (MI) were regarded and the co-variances with the highest modification indices considered. Based on this, a co-variance between the error terms of the items reputation1 and reputation5 \((MI=422.22)\) was added to the model. As the overall model fit was still not satisfactory after this modification, another co-variance was added between the error terms of the items reputation1 and reputation4 \((MI=68.82)\), resulting in an almost sufficient model fit (see figure 3). Although the model fit could not be considered as good, this measurement model was maintained due to two reasons: First, these co-variances were theoretically plausible: reputation1 and reputation4 both refer to the respondent’s belief of the VW Group’s good intentions regarding the emissions scandal and reputation1 and reputation5 both relate to the same statement that is once phrased positively (reputation1) and once phrased negatively (reputation5). Moreover, adding other co-variances did not lead to a better model fit.3

![Path diagram showing co-variances between error terms of the items reputation1 and reputation5, reputation1 and reputation4, and reputation1 and reputation5.](image)

**Sample size = 1475; standardized estimates**

\(\chi^2(3)=13.386; p=0.004; \chi^2/df= 4.462; GFI=.996; NFI=.995; CFI=.996; RMSEA=.048\)

**Figure 3: Measurement Model for Post-Crisis Reputation**

For the description of the post-crisis reputation, an index of the five reputation items was formed \((N=1475)\), representing the mean post-crisis reputation of the VW Group. According to that, the average reputation of the VW Group after the emissions scandal is \(M=3.7 (SD=1.25; Min=3.22; Max=4.4)\) on a seven-point Likert scale. Thus, the post-crisis reputation lies slightly above the scale’s middle of 3.5, indicating a moderate post-crisis reputation. For the present study, the internal consistency for the organizational reputation scale was \(\alpha=.795\), which implies an almost good reliability.

---

3 The process of allowing the error terms to correlate within a model and selecting the model with the best fit was also applied to the other measurement models (i.e. for each construct) that had four or more items. However, it could not be applied for the construct of only three items.


**3.5.2. Negative Word of Mouth Intention (NWOM)**

In order to measure the intention for NWOM, three items from previous studies were applied (e.g. Coombs & Holladay, 2008, 2009; Kiambi & Shafer, 2015). In prior studies, the scale had a reliability coefficient of Cronbach’s $\alpha=.76$ (Coombs & Holliday, 2008) and $\alpha=.71$ (Coombs & Holliday, 2008; Kiambi & Shafer, 2015). A sample item of this measurement is “Because of the emissions scandal, I would say negative things about the VW Group and its cars to other people.” As post-crisis reputation, this concept was also measured using a 7-point Likert scale (1=strongly disagree, 7=strongly agree).

As for the previous concept, an EFA using maximum likelihood factoring with a Varimax rotation was also applied to NWOM. Having a KMO value of 0.667 and a significant Bartlett's test for Sphericity, the performance of an EFA was appropriate. As theoretically assumed, the extraction of only one factor for the concept is proposed and all three items have a sufficient factor loading (see Appendix C). However, a CFO could not be performed because the model had no degree of freedom and was thus under-identified.

In order to solve this issue, a constraint was imposed. Imposing a constraint refers to the procedure of freely estimating parameters that were “fixed-to-zero” before (Kline, 1998, p. 132). As the first and the second item with which the NWOM intention was measured are relatively similar, it can be argued that the path estimates of both constructs can be set to 1. As a consequence, an additional degree of freedom was gained and thus the measurement model could just be identified. Although the fit of this measurement model was not ideal, as the Chi-Square and RMSEA values were too high, this model was maintained because no better model fit could be achieved (see figure 4).

![Diagram of measurement model for NWOM intention]

*Sample size = 1475; standardized estimates
$\chi^2(1)=19.026; p=0.000; \chi^2/df=19.026; GFI=.992; NFI=.986; CFI=.987; RMSEA=.111$*

*Figure 4: Measurement Model for NWOM intention*

For the description of the NWOM intention, an index of the three measured items was formed ($N=1475$). According to that, the average NWOM intention of the respondents is quite
low ($M=2.27; SD=1.43; Min=2.26; Max=3.29$). The Cronbach’s alpha coefficient of this study was $\alpha=.780$, indicating an acceptable, almost good, reliability.

### 3.5.3. Crisis Responsibility

To assess whether the VW Group was held responsible for the crisis, the newly invented scale by Brown and Ki (2013) was used and measured on a 7-point Likert scale (1=strongly disagree, 7=strongly agree). The 12-items scale consists of the three dimensions intentionality, locality and accountability and had a reliability of $\alpha=.95$ (Brown & Ki, 2013). As a result of the pretest of the present study, the scale for crisis responsibility was reduced to an eight-item scale, making it shorter and less repetitive (see Appendix A).

In order to explore whether the concept consists of one ore more dimensions, an EFA was performed. As the KMO measure had a value of .704 and the Bartlett’s test for Sphericity was significant, the EFA was appropriate to conduct. According to the Kaiser criterion, the extraction of three factors is suggested, confirming Brown and Ki’s (2013) theoretical assumption of the three dimensions “intentionality”, “accountability” and “locality”. As the second dimension (first factor) accounts for most of the explained variance (25.13 %) and consists of four of the eight variables with acceptable factor loadings, only this dimension was used for the further analysis (see Appendix C).

As a next step, the measurement model of the four remaining items of the crisis responsibility measure was tested in a CFA in Amos. With 2 degrees of freedom, the model was just over-identified and could thus be tested. As the low Chi-Square value indicated, the model had a good fit ($\chi^2(2)=2.685; p=0.261$), which was supported by other fit indices ($GFI=.999; NFI=.998; CFI=.999; RMSEA=.015$). Hence, no model modification was applied and the original model of four items maintained (see figure 5).

![Figure 5: Measurement model for crisis responsibility](image)

*Sample size = 1475; standardized estimates
$\chi^2(2)=2.685; p=0.261; \chi^2/df=1.342; GFI=.999; NFI=.998; CFI=.999; RMSEA=.015$
The index of the four crisis responsibility items \((N=1475)\), formed in order to describe the concept crisis responsibility, shows that the participants averagely assigned a quite high crisis responsibility to the VW Group \((M=5.91; \ SD=1.19; \ Min=5.63; \ Max=6.18)\). The internal consistency of the measurement was \(\alpha=.686\), thus rather low but just acceptable.

### 3.5.4. Crisis Involvement

The crisis involvement of the participants was measured by using the six-item, 7-point bipolar scale by Wigley and Pfau (2010). The scale is based on the involvement scale by Zaichkowski (1985) and had a reliability of \(\alpha=.95\) in a previous study (Wigley & Pfau, 2010). However, after the pretest, this scale was reduced by the item pair significant/insignificant because the distinction from other item pairs was clear enough. Furthermore, the respondents were asked whether they have been owning a car of the brands VW, Audi, Seat, Skoda or Porsche and, if so, whether it had been affected by the product recall, assuming that those participants who were affected would perceive the emissions scandal as more relevant.

The KMO measure had a value of \(.810\) and the Bartlett’s test for Sphericity was significant, indicating that an EFA was appropriate to perform. The EFA of the involvement concept proposed a one factor solution, which was in line with the theoretical assumptions of one single involvement dimension. All five items had a satisfactory factor loading (see Appendix C). Furthermore, the model was over-identified and could thus be tested \((df=5)\). As with the concept of post-crisis reputation, this measurement model also had a very high, significant Chi-Square value \((\chi^2(5)=490.858; \ p=0.000)\), implying the rejection of the model. In line with this, other model fit indices did not suggest an acceptable model fit \((GFI=.886; \ NFI=.882; \ CFI=.883; \ RMSEA=.257)\), either. Since the third item of the scale (means nothing/means a lot) was highly correlated with the fourth and fifth items, it was excluded from the model. Moreover, a constraint was imposed for the first and fifth item because their path estimates were the same \((\beta=.88)\) and they were theoretically very similar (unimportant/important, irrelevant/relevant). The implied modification of the measurement model thus led to an adjusted model of four items that had a good fit (see figure 6).

As with the previous variables, a mean index from the four remaining measured items was created \((N=1475)\) in order to present the descriptive analysis of the concept. According to the index, the average crisis involvement of the participants was \(M=4.27 (SD=1.57; \ Min=3.41; \ Max=4.57)\), which indicates that the respondents were involved with the VW emissions scandal above the scale’s average. The internal consistency of the four-item crisis involvement scale was \(\alpha=.852\), indicating almost an excellent reliability of the scale.
3.5.5. Mediators: Anger and Sympathy

The emotions anger and sympathy function as mediator variables in the present study. A mediator variable is a third variable that “reflects an intermediate link between an independent and dependent variable” (Pawar, 2009, p. 110). Applied to this study, this means that the two independent variables crisis involvement and crisis responsibility affect anger and sympathy which in turn influence the dependent variables post-crisis reputation and the intention for NWOM. As recommended by Zhao, Lynch & Chen (2010), the bootstrapping method was applied in order to test mediation effects. Bootstrapping is a method that is used for “estimating properties of estimators based on samples drawn from the original observations” (Bollen, 1990, p. 117). It is a useful approach for this study because it enables the estimation of direct, indirect and total effects and provides the 95% confidence intervals of each effect (Bollen, 1990).

The mediator variables anger and sympathy were assessed using two four-item scales from McDonald et al. (2011). The authors criticized “the absence of scales using words that incorporate consumers’ own crisis emotion lexicon and which are psychometrically robust” (McDonald et al., 2011, p. 337). Thus, they developed and tested scales specifically for crisis emotions (McDonald et al., 2011). The anger scale contained the items angry, disgusted, annoyed, outraged and had a reliability of $\alpha=0.91$ (McDonald et al., 2011). The sympathy scale posited by McDonald et al. (2011) consisted of the items sympathetic, sorry, compassion, empathy and had an internal consistency of $\alpha=0.83$. In this study, both concepts were measured using a 7-point Likert scale whereas 1 means “not at all” and 7 means “very much”.

3.5.6. Anger

The KMO measure had a value of 0.780 and the Bartlett’s test for Sphericity was significant, indicating that the performance of an EFA was suitable. In line with the theoretical assumptions,
the Kaiser's criterion suggested the extraction of only one factor and all factor loadings were sufficient (see Appendix C). Having two degrees of freedom, this measurement model was just over-identified, which is why a CFA could be performed. However, the high Chi-Square value ($\chi^2(2)=87.598; p=0.000$) and the high RMSEA value ($RMSEA=0.170$) indicated the rejection of the model. On the contrary, other model indices suggested an acceptable model fit ($GFI=.974; NFI=.968; CFI=.969$). However, by applying the above-explained adjustment methods, a better measurement model could be found. Adding a constraint to the path estimates of item1 (angry) and item2 (annoyed) as well as adding a co-variance between the error terms of item2 (annoyed) and item3 (disgusted) ($MI=45.47$) were not only theoretically reasonable but also resulted in a model with an acceptable fit (see figure 7). Since other co-variances with lower modification indices did not increase the model fit, only this co-variance was added.

As for the previous concepts, a mean index that is representing the average level of post-crisis anger towards the VW Group was created. The index of the four items shows that the participants’ anger after the crisis was below average ($M=3.32; SD=1.59; Min=2.56; Max=3.97$). The reliability score for this study was $\alpha=.855$, implying a good internal consistency of the measurement.

### 3.5.7. Sympathy

In order to find out whether the four items that measured sympathy represent one dimension, an EFA should be performed. According to the KMO measure of 0.720 and the significant Bartlett’s test for Sphericity, such an analysis was appropriate. Confirming the theoretical assumptions of such uni-dimensionality, the EFA offered only one factor for sympathy with sufficient factor loadings for each item (see Appendix C). The relation between the Chi-Square value and the degrees of freedom in the CFA was not acceptable ($\chi^2(2)=179.480; p=0.000$) and

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Sample size = 1475; standardized estimates
$\chi^2(2)=20.272; p=0.000; \chi^2/df=10.136; GFI=.993; NFI=.993; CFI=.993; RMSEA=0.079$

**Figure 7: Measurement model for anger**

---

### 3.5.7. Sympathy

In order to find out whether the four items that measured sympathy represent one dimension, an EFA should be performed. According to the KMO measure of 0.720 and the significant Bartlett’s test for Sphericity, such an analysis was appropriate. Confirming the theoretical assumptions of such uni-dimensionality, the EFA offered only one factor for sympathy with sufficient factor loadings for each item (see Appendix C). The relation between the Chi-Square value and the degrees of freedom in the CFA was not acceptable ($\chi^2(2)=179.480; p=0.000$) and
also the RMSEA value indicates a poor fit of the measurement model \((RMSEA=.245)\). Other model fit indices, on the other hand, implied an acceptable model fit \((GFI=.942; NFI=.918; CFI=.919)\). Nevertheless, as the modification indices suggested, an adjustment of the measurement model should be made. The proposed co-variance between the error terms of item1 and item4 had the highest modification index \((MI=159.73)\), was theoretically plausible and resulted in a model with a good fit. Thus, this measurement model was selected (see figure 8).

![Figure 8: Measurement model for sympathy](image)

For the descriptive analysis of sympathy, an index was created that constitutes the average level of sympathy towards the VW Group after the crisis. As the index indicates, participants did on average not feel very sympathetic about the VW Group after the emissions scandal \((M=2.14; SD=1.22; Min=1.84; Max=2.59)\). The reliability score for the index is \(\alpha=.799\), indicating a good internal consistency of the four-item measurement.

### 3.5.8. Moderator: Person-Company Fit

The final concept that is of interest for this study, person-company fit, functions as a moderator variable. A moderator variable can be defined as a variable that influences "the direction and/or strength of the relation between" the independent and dependent variable (Baron & Kenny, 1986, p. 1174). In the case of this study, this means that the degree of person-company fit is assumed to influence the relationships of the independent variables crisis involvement and crisis responsibility with the mediator variables anger and sympathy. It is expected that the person-company fit strengthens the relationship of crisis responsibility and involvement with sympathy but weakens the relationship of the two independent variables with anger.

The moderator variable person-company fit was measured using eight items. These
items were previously developed by Lin, Chen, Chiu and Lee (2011) based on scales by Keh and Xie (2009) and Mael and Ashforth (1992) as well as items of Mael and Ashforth (1992) themselves. The scale was measured using a 7-point Likert scale (1=strongly disagree, 7=strongly agree).

As two items were excluded due to their high skewness values (see Chapter 3.3.1), an EFA was performed in order to examine whether the six remaining items represent one single dimension. According to the KMO measure ($KMO=.831$) and the significant Bartlett's test for Sphericity, an EFA was applicable. As the performed EFA suggests a one-factor solution, the theoretical assumption of one dimension of person-company fit can be confirmed. Supporting this, all factor loading are sufficient (see Appendix C). Having nine degrees of freedom, this measurement model was clearly over-identified and a CFA can be performed. However, the high Chi-Square value ($\chi^2(9)=295.618; p=0.000$) and the high RMSEA value ($RMSEA=0.147$) indicated the rejection of the model. On the other hand, other model indices already suggested an acceptable model fit ($GFI=.935; NFI=.916; CFI=.918$). Nevertheless, a model with a much better fit could be found by eliminating item two and item eight of the concept (see figure 9).

![Measurement model for person-company fit](image)

**Sample size = 1475; standardized estimates**

$\chi^2(2)=5.149; p=0.076; \chi^2/df=2.574; RMSEA=0.033; GFI=.998; NFI=.998; CFI=.998$

**Figure 9: Measurement model for person-company fit**

As with the previous concepts, a mean index of the four remaining items was created ($N=1475$) in order to present the descriptives of the person-company fit. According to the index, the respondents have an averagely low person-company fit ($M=2.73; SD=1.32; Min=1.98; Max=2.07$), which indicates that the respondents do not highly identify themselves with the company. The internal consistency of the person-company scale is $\alpha=.802$, indicating a good reliability of the scale.

In order to test the four hypotheses of the moderation effects, two interaction variables are created. For this, the scores of two latent variables are multiplied for each moderator.
variable (Schumacker & Lomax, 2004). More precisely, for the first moderator, the standardized mean index of crisis responsibility is multiplied by the standardized mean index of person-company fit. In line with this, for the second moderator, the standardized mean index of crisis involvement is multiplied by the standardized mean index of person-company fit. Next, the skweness and kurtosis of the two interaction variables are examined. For the first moderator, both values exceed the required values of 2 for skweness and 7 for kurtosis ($skewness_{moderator1} = -3.66; kurtosis_{moderator1} = 21.11$). However, as this moderator variable is central to testing the hypotheses of this study, it is maintained. The deviations have to be remembered for the interpretation of the data, though. For the second moderator variable, no problematic values can be detected. Thus, both moderator variables are added to the model in order to test the moderating effects. Next to this, correlations between the two moderator variables, the person-company fit index and the independent variables crisis responsibility and crisis involvement are added to the model. Since the moderator variables are generated from these other two variables, correlations between them are expected to occur.
4. Results

After the theoretical concepts have been tested, this chapter contains the testing of the twelve hypotheses, including the mediation and moderation effects. The interpretation and discussion of the results will follow in chapter five.

In order to test the hypotheses, all above-described measurement models are included in a Full Latent Variable Model, which is based on the theoretically derived conceptual model (see chapter 2.5). This is because the Full Latent Variable Model enables "the specification of regression structure among the latent variables" (Byrne, 2001, p. 6). The model consists of both the overall measurement model and the structural model (Byrne, 2001). Thereby, the former describes the relationships between each latent concept with their observed indicators (see Chapter 3) and the latter describes the relationships between the latent variables (Byrne, 2001). Thus, the implied causal relationships between the latent concepts, as posed in the hypotheses of this study, can be tested by using the structural model (Caruana & Erwing, 2010). Before being able to test the hypotheses, the model fit of the Full Latent Variable Model has to be examined. Despite the adjustments that were undertaken for each measurement model (see Chapter 3), the overall structural model does not have a good model fit ($\chi^2(12)=183.733; p=0.000; \text{RMSEA}=0.099; \text{GFI}=.973; \text{NFI}=.964; \text{CFI}=.966$) because the Chi-Square value is by far too high and the RMSEA value is not acceptable either. As the high Chi-Square value can be explained by the large sample size and the values of the other three model fit indices are good, the model is kept for this analysis, though. Figure ten shows the structural model with which the relationships between the latent variables are tested and table one gives an overview of all path estimates.4

Hypothesis 1

The first hypothesis assumes that anger negatively influences the post-crisis reputation of the VW Group. It was found that anger has a highly significant negative impact on the post crisis reputation. This means that the angrier the respondents are towards the VW Group in the context of the emissions scandal, the worse they evaluate the post-crisis reputation of the corporation. More precisely, when anger goes up by 1, the post-crisis reputation goes down by .192. Thus, the first hypothesis is supported.

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4 Throughout the results and discussion sections, the standardized beta estimates are presented.
Figure 10: Structural Model

Note: ***p ≤ .001, **p ≤ .01, *p ≤ .05
Sample size = 1475; Standardized estimates are portrayed
$\chi^2(12) = 183.733; p = 0.000; \chi^2/df = 15.311; RMSEA = 0.099; GFI = 0.973; NFI = 0.964; CFI = 0.966$
### Table 1: Summary of results

<table>
<thead>
<tr>
<th>Paths</th>
<th>Model Specifications</th>
<th>Beta coefficient</th>
<th>SE</th>
<th>Percentile confidence intervals</th>
</tr>
</thead>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Direct effects of mediators on DV (b paths)</td>
<td>Anger (\rightarrow) Reputation</td>
<td>-0.436***</td>
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<td>-0.470</td>
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<td>Sympathy (\rightarrow) Reputation</td>
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<td>0.469</td>
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<td>Anger (\rightarrow) NWOM</td>
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<td>Sympathy (\rightarrow) NWOM</td>
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<td>IV to mediators (a paths)</td>
<td>Responsibility (\rightarrow) Anger</td>
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<td>ModeratorI (\rightarrow) Anger</td>
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<td>ModeratorII (\rightarrow) Anger</td>
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<td>Person-Company Fit (\rightarrow) Anger</td>
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<td>0.022</td>
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<td>Responsibility (\rightarrow) Sympathy</td>
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<td>Direct effects of IV on DV (c paths)</td>
<td>Responsibility (\rightarrow) Reputation</td>
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<td>-0.391</td>
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<td>-0.086</td>
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**R squared**

<table>
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<th>Anger</th>
<th>Sympathy</th>
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<td>0.548</td>
<td>0.556</td>
<td>0.458</td>
<td>0.550</td>
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</table>

**Note:** ***p<.001, **p<.01, *p<.05**

**Sample size = 1475; Standardized estimates are portrayed**

**Level of confidence for confidence intervals = 95 %**

**Number of bootstrap resamples = 2,000**
Hypothesis 2
The second hypothesis postulates that sympathy positively influences the VW Group’s post-crisis reputation. The analysis has shown that sympathy has a highly significant positive effect on the VW Group’s post-crisis reputation. As people felt more sympathetic towards the corporation in the context of the emissions scandal, they rated the VW Group’s post-crisis reputation higher. In fact, when sympathy increases by 1, the evaluation of the post-crisis reputation increases by .272. Compared to the impact of anger on the post-crisis reputation, the effect of sympathy is even stronger. Hence, the second hypothesis is supported, as well. Furthermore, both predictors of post-crisis reputation explain 54.8 percent of the variance of post-crisis reputation ($R^2=.548$). This means that the two emotions determine the variance of post-crisis reputation to a large extent but not completely.

Hypothesis 3
According to the third hypothesis, anger increases the intention for NWOM about the VW Group. As the analysis has shown, anger had a highly significant negative impact on the participants’ NWOM intention. The more anger the respondents felt towards the VW Group regarding the emissions scandal, the higher was their intention to say negative things about the corporation. When anger increases by 1, the NWOM intention rises by .500. This impact was even stronger than that of anger on post-crisis reputation and that of sympathy on post-crisis reputation. Concluding, this hypothesis can also be supported.

Hypothesis 4
Hypothesis four postulates that sympathy has a negative impact on the intention for NWOM about the VW Group. It was found that sympathy significantly decreased the NWOM intention of the respondents. As sympathy goes up by 1, the respondents’ NWOM intention goes down by .242. In comparison to anger, sympathy had a weaker effect on the NWOM intention of the participants, though. Additionally, the impact of sympathy on the NWOM intention is weaker than that of sympathy and anger on the post-crisis reputation. Nevertheless, the fourth hypothesis can be supported. Next to this, both predictors of NWOM explain 55.6 percent of the variance of the dependent variable ($R^2=.556$). Thus, the two emotions determine more than half of the variance of NWOM.
Hypothesis 5

The fifth hypothesis states that the higher the level of perceived crisis responsibility, the more anger the respondents feel towards the VW Group. The results of the data analysis support this hypothesis. When the perceived crisis responsibility increases by 1, the feeling of anger raises by .293. Hence, respondents who believed that the VW Group was responsible for the emissions scandal expressed more anger towards the Group.

Hypothesis 6

In contrary to hypothesis five, hypothesis six postulates that a higher level of perceived crisis responsibility leads to less sympathy towards the VW Group. As indicated by the data analysis, the more crisis responsibility the respondents ascribed to the VW Group, the lower was their feeling of sympathy towards the corporation. When the perceived crisis responsibility goes up by 1, the felt sympathy towards the VW Group goes down by .247. In comparison to the impact on anger, crisis responsibility has a minimal stronger effect on sympathy. Concluding, the sixth hypothesis can be supported.

Hypothesis 7

Hypothesis seven assumes that involvement has a positive impact on anger. The results of the analysis support this assumption: The more involved the respondents were with the VW emissions scandal, the angrier they were towards the VW Group. In fact, when the involvement with the VW emissions scandal increases by 1, the anger rises by .576. Based on the highly significant positive impact of crisis involvement on anger, this hypothesis can be supported.

Hypothesis 8

On the contrary to hypothesis seven, hypothesis eight postulates that a higher level of crisis involvement leads to a lower level of sympathy towards the VW Group. The data analysis revealed that crisis involvement had a small significant negative impact on sympathy. When the involvement with the emissions scandal increases by 1, the sympathy felt towards the VW Group decreases by .051. Comparing the beta values of the relationships between involvement and the two emotions anger and sympathy, it becomes clear that involvement has a much stronger impact on anger than on sympathy. Nevertheless, hypothesis eight can be supported. In addition, 45.8 percent of the variance of anger ($R^2=.458$) and 55 percent of sympathy ($R^2=.550$) are predicted by crisis responsibility and crisis involvement. This means that both emotions can be explained by the two independent variables to a large extent but not completely.
4.1. Testing of Mediation Effects

Next, it was tested whether the two emotions anger and sympathy function as mediators that form an intermediate link between the two independent variables crisis involvement and crisis responsibility and the two dependent variables post-crisis reputation and NWOM. According to Baron and Kennedy (1986), three requirements must be fulfilled in order to argue that a variable is a mediator. First, the independent variable significantly predicts the dependent variable (c path). Second, the mediator variable significantly predicts the dependent variable (b path) and last, when the mediator is added to the model, the relationship between the independent and dependent variables (c path) is reduced (c’ path) (Baron & Kennedy, 1986; Little, Card, Bovaird, Preacher & Crandall, 2007). As it is displayed in table one, these three assumptions are met for the relationships between the variables - thus mediation effects occur. Since the direct effects between crisis responsibility and both crisis outcomes (i.e. post-crisis reputation and NWOM) remain significant after both mediators are added (c’ paths), partial mediations occur in these relationships (Little et al., 2007). As for the relationships between crisis involvement and both crisis outcomes, full mediations occur because the direct effect is not significant anymore once both mediators are added to the model (c’ path) (Little et al., 2007).

Table two provides an overview of all mediation effects of this model, including the bootstrapping results. It is shown that all mediation effects are highly significant, meaning that anger and sympathy function as mediators for all effects between the independent and dependent variables. While negative mediation effects occur in the relationships between crisis responsibility and crisis involvement with post-crisis reputation, positive mediation effects exist in the relationships of the two independent variables with NWOM intention. Thereby, the mediation effect in the relationship between crisis involvement and NWOM intention is the strongest. However, not only the total mediation effects of both emotions in each relationship are of interest but also their separate effects. As table two shows, anger has a stronger mediating effect than sympathy in all relationships except for that of crisis responsibility and crisis reputation. Thereby the strongest mediation effect of anger occurs in the relationship between crisis involvement and NWOM. While both emotions take on a mediating role in this study, these results indicate that anger is a more important mediator in the VW emissions scandal than sympathy.
Table 2: Bootstrapping Results for Mediation Effects

<table>
<thead>
<tr>
<th>DV = Post-Crisis Reputation</th>
<th>Indirect effects of IV on DV through proposed mediators (ab paths)</th>
<th>Percentile confidence intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV = Crisis Responsibility</td>
<td>Beta</td>
<td>SE</td>
</tr>
<tr>
<td>Total</td>
<td>-.204</td>
<td>.015</td>
</tr>
<tr>
<td>Anger</td>
<td>-.093</td>
<td>.010</td>
</tr>
<tr>
<td>Sympathy</td>
<td>-.112</td>
<td>.013</td>
</tr>
<tr>
<td>IV: Crisis Involvement</td>
<td>Total</td>
<td>-.288</td>
</tr>
<tr>
<td>Anger</td>
<td>-.258</td>
<td>.013</td>
</tr>
<tr>
<td>Sympathy</td>
<td>-.032</td>
<td>.010</td>
</tr>
<tr>
<td>DV = NWOM</td>
<td>Total</td>
<td>.193</td>
</tr>
<tr>
<td>IV = Crisis Responsibility</td>
<td>Anger</td>
<td>.138</td>
</tr>
<tr>
<td>Sympathy</td>
<td>.056</td>
<td>.007</td>
</tr>
<tr>
<td>IV: Crisis Involvement</td>
<td>Total</td>
<td>.394</td>
</tr>
<tr>
<td>Anger</td>
<td>.380</td>
<td>.016</td>
</tr>
<tr>
<td>Sympathy</td>
<td>.016</td>
<td>.005</td>
</tr>
</tbody>
</table>

Note: ***p≤.001, **p≤.01, *p≤.05
Sample size = 1475
Level of confidence for confidence intervals = 95%
Number of bootstrap resamples = 2,000

4.2. Hypotheses 9 through 12 – Moderation Effects

The following four hypotheses address the moderating role of person-company fit on the relationships of crisis involvement and crisis responsibility with the two emotions. Hypothesis nine assumes that a higher person-company fit weakens the relationship between perceived crisis responsibility and anger. This signifies that if people have a high person company fit, they would feel less anger even if they attribute high crisis responsibility to the VW Group. As the testing of the moderation effect of this relationship shows, the interaction effect between crisis responsibility and person-company fit has a significant weak negative effect on anger. This indicates that with a higher person-company fit, the influence of crisis responsibility on anger decreases, leading to less anger. Thus, this hypothesis can be supported: Person-company fit functions as a moderator in this relationship.

Hypothesis ten postulates that a higher person-company fit intensifies the relationship between perceived crisis responsibility and sympathy. This means that if people have a high
person-company fit, they tend to feel more sympathy towards the VW Group despite a perceived crisis responsibility. This would indicate that crisis responsibility matters less if people have a high person-company fit. Results of the data analysis reveal that the interaction effect between crisis responsibility and person-company fit has a weak significant positive impact on sympathy. Hence, this hypothesis can be accepted, as well: Person-company fit moderates the relationship between crisis responsibility and sympathy.

Hypothesis eleven assumes that a higher person-company fit will weaken the relationship between felt crisis involvement and anger. This signifies that if people have a high person-company fit, they would be less angry with the VW Group regarding the emissions scandal even though they are highly involved with the emissions scandal itself. Results indicate that a weak significant negative effect occurred and thus the hypothesis for this interaction effect can be supported: Person-company fit functions as a moderator in this relationship.

Lastly, hypothesis twelve postulates an interaction effect of person-company fit and crisis involvement on sympathy, indicating that a higher person-company fit will intensify the relationship between felt crisis involvement and sympathy. In the case of high involvement, a high person-company fit would lead to more sympathy towards the VW Group as with low person-company fit. Testing this assumption shows a minimal negative but not significant effect. This leads to the rejection of the last hypothesis: Person-company fit has no moderating effect on the relationship between involvement and sympathy. Summarized, eleven of the twelve hypotheses of this study can be accepted.

4.3. Comparison of Affected and Non-Affected Publics

In order to examine whether the above-found effects differ for people who have been affected by the VW emissions scandal compared to those who were not directly affected by it, a multigroup analysis was performed. As explained in the questionnaire, affected people are those who own a car of the brands VW, Audi, Seat, Skoda or Porsche because these have been affected by the emissions scandal. Consequently, non-affected people are the ones who do not own such cars. It is assumed that the effects of responsibility and involvement on anger as well as that of anger on post-crisis reputation and NWOM would be stronger among affected people compared to those who were not affected. On the contrary, the effects that involved sympathy would be weaker for the affected group. The Chi-Square difference test of the multigroup analysis reveals that the two tested models (affected vs. non-affected) are significantly different. While the model of the affected participants has a Chi-Square value of $\chi^2(12)= 65.915 \ (p=0.000)$, the model of the non-affected participants has a Chi-Square value of $\chi^2(12)= 148.345 \ (p=0.000)$. In order to find out which specific relationships differ the two models, the single path estimates were regarded. For
this, single paths were compared by freely estimating the two models except for single paths that were constrained (Byrne, 2013).

<table>
<thead>
<tr>
<th>Paths</th>
<th>Model Specifications</th>
<th>Affected Beta coefficient</th>
<th>Affected SE</th>
<th>Non-affected Beta coefficient</th>
<th>Non-affected SE</th>
<th>Difference Beta coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct effects of mediators on DV</td>
<td>Anger $\rightarrow$ Reputation</td>
<td>-.438***</td>
<td>.008</td>
<td>-.435***</td>
<td>.008</td>
<td>-.003 (p=.006)</td>
</tr>
<tr>
<td></td>
<td>Sympathy $\rightarrow$ Reputation</td>
<td>.550***</td>
<td>.010</td>
<td>.494***</td>
<td>.009</td>
<td>.056 (p=.353)</td>
</tr>
<tr>
<td></td>
<td>Anger $\rightarrow$ NWOM</td>
<td>.672***</td>
<td>.014</td>
<td>.640***</td>
<td>.014</td>
<td>.032 (p=.001)</td>
</tr>
<tr>
<td></td>
<td>Sympathy $\rightarrow$ NWOM</td>
<td>-.286***</td>
<td>.017</td>
<td>-.247***</td>
<td>.013</td>
<td>-.039 (p=.756)</td>
</tr>
<tr>
<td>IV and moderators to mediators</td>
<td>Responsibility $\rightarrow$ Anger</td>
<td>.226***</td>
<td>.029</td>
<td>.204***</td>
<td>.026</td>
<td>.022 (p=.026)</td>
</tr>
<tr>
<td></td>
<td>Involvement $\rightarrow$ Anger</td>
<td>.584***</td>
<td>.020</td>
<td>.583***</td>
<td>.020</td>
<td>.001 (p=1.50)</td>
</tr>
<tr>
<td></td>
<td>Moderator I $\rightarrow$ Anger</td>
<td>-.104***</td>
<td>.031</td>
<td>-.074***</td>
<td>.029</td>
<td>-.030 (p=.698)</td>
</tr>
<tr>
<td></td>
<td>Moderator II $\rightarrow$ Anger</td>
<td>-.112***</td>
<td>.030</td>
<td>-.085***</td>
<td>.027</td>
<td>-.027 (p=.352)</td>
</tr>
<tr>
<td></td>
<td>Person Company Fit $\rightarrow$ Anger</td>
<td>-.076***</td>
<td>.022</td>
<td>-.069***</td>
<td>.022</td>
<td>.007 (p=.845)</td>
</tr>
<tr>
<td></td>
<td>Responsibility $\rightarrow$ Sympathy</td>
<td>-.218***</td>
<td>.022</td>
<td>-.217***</td>
<td>.023</td>
<td>.001 (p=.211)</td>
</tr>
<tr>
<td></td>
<td>Involvement $\rightarrow$ Sympathy</td>
<td>-.056***</td>
<td>.014</td>
<td>-.062***</td>
<td>.014</td>
<td>-.006 (p=.716)</td>
</tr>
<tr>
<td></td>
<td>Moderator I $\rightarrow$ Sympathy</td>
<td>.054*</td>
<td>.023</td>
<td>.042*</td>
<td>.023</td>
<td>.012 (p=.099)</td>
</tr>
<tr>
<td></td>
<td>Moderator II $\rightarrow$ Sympathy</td>
<td>-.034</td>
<td>.022</td>
<td>-.028</td>
<td>.020</td>
<td>-.006 (p=.556)</td>
</tr>
<tr>
<td></td>
<td>Person Company Fit $\rightarrow$ Sympathy</td>
<td>.630***</td>
<td>.016</td>
<td>.634***</td>
<td>.015</td>
<td>-.004 (p=.826)</td>
</tr>
</tbody>
</table>

**Note:** ***p≤.001, **p≤.01, *p≤.05

Sample size affected = 163, Sample size non-affected = 1312;

Chi-Square affected $\chi^2$(12) = 148.345 (p=0.000); Chi-Square non-affected $\chi^2$(12) = 148.345 (p=0.000)

Standardized regression weights of structural weights are portrayed
Table three provides an overview of the path estimates of both models as well as the differences for each path. It becomes clear that the differences between the path estimates are very small and most of them are not significant. The only significant difference between the two models could be found in the effect that crisis responsibility has on anger and on the impact that anger has on both crisis outcomes. According to the analysis, responsibility had a slightly stronger impact on anger among the affected public. Moreover, anger had a minimal stronger negative impact on post-crisis reputation and a minimal stronger positive impact on people's NWOM intention among those who were affected. This signifies that among participants who were affected, crisis responsibility resulted in more anger, which in turn led to a worse evaluation of the VW Group's post-crisis reputation and a stronger intention to express NWOM compared to the not affected participants. Although these differences are minimal, the crucial role of anger in this study is underlined.

4.4. **Further Findings**

Finally, the data analysis revealed some further relevant findings. For the testing of the moderation effects, the concept person-company fit was added to the model. Results of the analysis showed that person-company fit not only has a moderating role in this model but also directly affects on the two emotions anger and sympathy. More precisely, person-company fit had a weak significant negative impact on anger ($\beta=-.065; p=.002$) and a strong highly significant positive impact on sympathy ($\beta=.635; p=.001$). When the person-company fit increased by one, anger decreased by .067 and sympathy increased by .542. This means that participants who identified themselves more with the VW Group felt slightly less anger and by far more sympathy towards the corporation compared to those who identified themselves less with the VW Group. Thereby, the effect size person-company fit has on sympathy is stronger than all effects of the two independent variables on the two emotions (see table 1).
5. Discussion and Conclusion

In this chapter, the preceding results of the data analysis will be interpreted and discussed against the background of the above-explained theory. Thereby, the research questions will be answered as well as managerial implications given. In addition, conclusions from the results will be drawn, strengths and limitations of the present study presented as well as implications for future research proposed.

5.1. Interpretation of Results

One of the main interests of this study was the exploration of the VW Group’s post-crisis reputation and the NWOM intention of the German public. In this context, it was argued that the corporation’s favorable pre-crisis reputation could have functioned as a halo that protected the VW Group from reputation loss and negative behavior intentions after the crisis. On the other hand, the favorable prior reputation could have increased expectations of the corporation, which were violated due to the emissions scandal and thus resulted in negative crisis outcomes. Results indicate that the respondents’ evaluation of the Group’s post-crisis reputation was modest ($M=3.7; SD=1.25$) and their NWOM intention was very low ($M=2.27; SD=1.43$). With respect to the post-crisis reputation, it was assumed that the VW Group’s favorable prior reputation would save the corporation reputational loss. Due to the moderate reputation after the crisis, the existence of the halo-effect can be challenged, though. However, not only the pre-crisis reputation but also other factors can affect an organization’s post-crisis reputation (see chapter 2.1.1) and thus need to be considered when interpreting this outcome. The high level of crisis responsibility that is attributed in an intentional crisis or the VW Group’s prior crisis history and crisis responses need to be considered. As respondents attributed a high level of crisis responsibility to the VW Group, this could have had a strong effect on the corporation’s post-crisis reputation. In fact, the post-crisis reputation could have even been lower without such a favorable prior reputation. This would then be an argument for the occurrence of the halo effect.

The low NWOM intention of the participants was very surprising, considering the fact that the emissions scandal was an intentional crisis that lead to the ascription of a high crisis responsibility. However, as Kiambi and Shafer (2015) found, people have a lower intention to express NWOM for a high reputed organization compared to a low reputed organization. Thus, the favorable pre-crisis reputation could not only have protected the corporation from more reputational loss due to the emissions scandal but also from negative behaviors and behavioral intentions directed to the VW Group. This would mean that people did not want to engage in NWOM about VW Group due to their positive attitude about the corporation prior to the crisis.
This would suggest the shielding function of a favorable pre-crisis reputation regarding negative behavior intentions and indicate that the VW Group’s prior reputation did play an important role in protecting it from NWOM.

One further explanation for the occurrence of a modest post-crisis reputation and a low NWOM intention among the German public could be the country-of-origin effect. Previous studies have implied that consumers apply a product’s characteristics, such as the country of origin, as an evidence for product quality in order to compare a product’s quality to that of others. The country of origin thereby signals stereotypes of products (Lee, Yun & Lee, 2005), for instance the “made in” tag (Yun, Lee, and Sego 2002). While a positive image of a nation results in a positive assessment of its products, a negative one leads to a negative assessment (Zhukov, Bhuiyan & Ullah, 2015). Transferring the country-of-origin effect to a corporate level, Etayankara and Bapuji (2009) conclude from their literature review of product recalls that the magnitude of company losses depends not only on the severity of the crisis or the company’s reputation but also on the image of the country. As the VW Group is a German corporation and the label “made in Germany” has been associated with a high product quality (Haucap, Wey & Barmbold, 1997), it can be thus assumed that it prevented the corporation from more negative crisis outcomes.

Moreover the present study investigated the respondents’ emotional responses to the VW emissions scandal. Based on the crisis type, a rather high level of anger and a low level of sympathy towards the VW Group were expected. Despite these assumptions, the respondents had only a moderate degree of anger towards the VW Group and the emissions scandal (M=3.32; SD=1.59), thus not confirming the prior assumption. However, as the standard deviation was quite high for this emotion, it can be concluded that the participants did hardly agree regarding their level of anger. Taking the VW Group’s favorable pre-crisis reputation into account, it could be assumed that it protected the Group from being faced with a high level of anger. Kiambi and Shafer (2015) for instance found in their study that respondents were less angry towards an organization with a favorable pre-crisis reputation than towards an organization with a prior unfavorable reputation. Another explanation for this modest level of anger could be the time between the outbreak of the emissions scandal and the survey. According to Coombs and Holladay (2007), emotional responses can decrease over time because the stakeholders forget about a crisis. As this study was conducted about six months after the first information on the emissions scandal was published, it could be the case that the respondents were simply not angry anymore.

On the contrary, the assumed low level of sympathy felt by the respondents was confirmed by this study (M=2.14; SD=1.22). This proves that also positive emotions can emerge in a crisis, as Folkman and Moskowitz (2000) had proposed. Coombs and Holladay (2005) found that the most sympathy was felt in the case of a victim crisis in which low responsibility was attributed to the
organization. An intentional crisis on the other hand resulted in a low level of sympathy. The VW emissions scandal cannot only theoretically be categorized as an intentional crisis with a high crisis responsibility, but also the respondents of this study attributed a high responsibility to the corporation. Therefore, it is in line with previous expectations that they felt only little sympathy towards the VW Group after the emissions scandal had occurred.

Regarding the effect of both emotions on the two investigated crisis outcomes, it was found that anger had a negative impact on the VW Group’s post-crisis reputation and sympathy a positive effect on this crisis outcome. Thus, these findings are not only in line with that of Choi and Lin (2009b) but also expand it, as not only an effect of anger but also of sympathy on reputation was found. Moreover, these results confirm one extension of the SCCT model with a direct path from emotions to reputation, as Choi and Lin (2009b) proposed. Further, it is especially interesting that sympathy had an even stronger effect on reputation than anger. This implies the importance of considering not only the negative but also especially the positive emotion in a crisis.

Moreover, both emotions had an impact on the participants’ intention for NWOM, with anger resulting in a higher intention to express negative statements about the VW Group and sympathy leading to a lower NWOM intention. These findings are thus in line with McDonald et al.’s study (2010), which found that a higher level of anger resulted in a higher NWOM intention. Furthermore, the results confirmed part of the negative communication dynamic that was posed by Coombs et al. (2007). However, while Coombs et al. (2007) did not find evidence for their hypothesis and concluded that the moderate level of anger was not enough to result in NWOM, the study at hand proved that already a low level of anger strongly increased people’s intention to express NWOM. Due to its effect size, the significance of anger is even more emphasized. However, as sympathy was found to decrease people’s NWOM intention, this positive emotion should not be left out either. Thus, while anger had a higher impact on reputation than on the NWOM intention, sympathy had a stronger effect on people’s intention to use NWOM than their evaluation of the VW Group’s post-crisis reputation. Nevertheless, all four effects were quite high, underlining the decisive role of both emotions in the context of the VW emissions scandal.

Besides having found evidence for the impacts of both emotions on the two crisis outcomes, the present study also confirmed the mediating role of anger and sympathy in the relationships of crisis responsibility and crisis involvement with the post-crisis reputation and NWOM intention. Thereby, anger formed an especially strong link between the two independent variables and NWOM. Overall, sympathy did not mediate the relationships between the independent and dependent variables as strongly as anger, with one exception being the link between crisis responsibility and the post-crisis reputation, where sympathy had a slightly
stronger impact than anger. This emphasizes the significance of avoiding anger in a crisis even further.

Since the VW emissions scandal can be categorized in the intentional crisis cluster, it was assumed that the respondents would attribute a high level of crisis responsibility to the VW Group. Results show that the respondents tended to believe that the VW Group was responsible for the occurrence of the emissions scandal ($M=5.91; SD=1.19$). Hence, this study’s findings confirm this proposed assumption. When interpreting these findings, it should be considered, though, that the initial measurement of crisis responsibility was reduced in the data analysis process. As the remaining items belong to the accountability dimension of the original measurement by Brown and Ki (2013), the responsibility solely stands for “the degree to which the organization could have avoided the crisis” (p. 14). Thus, when interpreting the VW Group’s crisis responsibility in this study, it does not refer to intentionality, meaning “the degree to which the crisis was created purposefully by a member or members of the organization,” nor locality, referring to “the degree to which the crisis is an internal matter” (Brown & Ki, 2013, p. 14). Hence, the participants believed to a high extent that the VW Group is accountable for the emissions scandal and that it could have avoided the crisis from occurring.

This study revealed that crisis responsibility resulted in both anger and sympathy, thus confirming Coombs’ (2007a) and Coombs and Holladay’s (2005) assumptions that crisis responsibility triggers the two main emotions of AT. As hypothesized and in line with SCCT (Coombs, 2007a), a higher perceived crisis responsibility, thus holding the VW Group accountable for the occurrence of the emissions scandal, resulted in more anger but less sympathy towards the corporation compared to those who assigned less crisis responsibility to the VW Group. Thereby, the effects of crisis responsibility on both emotions had approximately the same strength. Thus, contradicting to Choi and Lin’s (2009b) study, the present study also found evidence for the relation of responsibility and sympathy, therefore confirming its role as a predictor for positive and negative emotions in a crisis.

Meeting the call for examining the concept of involvement in crisis communication research (McDonald & Härtel, 2000), this study incorporated crisis involvement as a predictor for emotions. Because of the VW Group’s importance for the German population and its favorable prior reputation, it was argued that the emissions scandal would be perceived as highly relevant by the German public. Furthermore, the emissions scandal was quite unexpected and developed to a severe, international crisis. This is another reason why it was assumed that it did matter to the German respondents. This study’s results indicate, though, that the respondents were only involved on a modest level ($M=4.27; SD=1.57$), thus not confirming this assumption. One possible explanation for this is the changeability and dynamic of the concept of felt involvement.
(McDonald & Härtel, 2000). It could be the case, that the felt crisis involvement was especially high when the emissions scandal first went public. However, as felt involvement is a personal state that can change over time (Celsi & Olson, 1988), it might be the case that the level of crisis involvement has decreased since then. In addition, the emissions scandal could have been perceived as less relevant because more and more information on also other automotive manufacturers who have manipulated cars were published (e.g. Weingartner, 2015).

Results provide evidence for the significance of the concept in the VW emissions scandal. Respondents who were more involved with the emissions scandal, meaning that they perceived the crisis as personally relevant, felt significantly angrier towards the corporation. This finding supports McDonald and Härtel's (2000) and Coombs and Holladay's (2005) assumptions that the level of involvement determines a person's intensity of emotions in a crisis. Considering the strength of this effect, crisis involvement was very important for predicting anger in the VW emissions scandal. The impact of crisis involvement was even stronger than that of crisis responsibility when determining anger. This is contrary to the findings of McDonald et al. (2010), who found that crisis responsibility was a more important predictor for emotional reactions in a crisis than involvement. Given the fact that McDonald et al. (2010) used the same initial measurement for crisis involvement by McQuarrie and Munson (1992), this finding is especially interesting. These opposing findings can be explained by the different research approaches that were used by McDonald et al. (2010) and in the study at hand. While McDonald et al. (2010) used an experimental approach with an artificial airline company that has experienced an artificial crash, the present study used a survey method and a real crisis scenario. Regarding the influence of crisis involvement on sympathy, this study found that a higher level of felt crisis involvement resulted in less sympathy towards the VW Group, thus confirming the results of McDonald et al.'s (2010) study. The impact of crisis involvement on sympathy was rather low, though, compared to that on anger. Furthermore, in comparison with the effect that crisis responsibility had on sympathy, the effect of crisis involvement was only about half as strong, which is in line with the study of McDonald et al. (2010) as well. Concluding, crisis involvement was a stronger predictor for anger, while crisis responsibility was a stronger predictor for sympathy. This indicates the crucial role of involvement in a crisis and implies the incorporation of the concept in the SCCT framework.

In order to draw a connection between the individual and corporate level of the emissions scandal, the identification of Germans with the VW Group was included in this study as the person-company fit. Due to the VW Group's favorable pre-crisis reputation, it was assumed that the respondents would have a high identification with the corporation. Despite this expectation, the respondents had an averagely low person-company fit ($M=2.73; SD=1.32$) and thus a low identification with the VW Group. One reason for the low level of identification could be the
impact of the VW emissions scandal on the participants' identification with the corporation. Although the questions about the person-company fit were asked before even mentioning the emissions scandal in the questionnaire in order to keep the impact of the crisis as low as possible, it could still be the case that the emissions scandal affected the participants' identification with the corporation. This is contradicting to Ashforth and Mael's (1989) assumption that the identification with a group endures even after the failure of a group. On the other hand, it is in line with Berger et al. (2006) who suggest that changed members of an organization can affect beliefs and identification. Another possible reason could be the size and composition of the VW Group. As the corporation consists of several subsidiaries, products and brands, it could be very difficult for people to identify themselves with the corporation as a whole. Instead, it could be the case that they are more likely to identify themselves with certain brands, such as VW or Porsche, or products, such as the Volkswagen Camper T2.

It was argued that the level of the respondent's identification with the VW Group would affect the relationships of crisis responsibility and crisis involvement with the emotional responses anger and sympathy. Results of this study show that person-company fit functioned as a moderator in the relationships between crisis responsibility with both emotions and between involvement and anger. In the case that people identified themselves more with the VW Group, the influence of crisis responsibility and crisis involvement on anger was weakened, resulting in less anger towards the VW Group. Moreover, a higher identification with the VW Group strengthened the impact of crisis responsibility on sympathy, leading to more sympathy. Further findings also revealed, that person-company fit not only moderated such relationships but also directly affected both emotions. Thereby, it had a particularly strong impact on sympathy. All of these findings imply that building a stronger person-company relationship can reduce the negative emotional reaction and increase the positive affect. This underlines the significance of a high person-company fit in the VW emissions scandal. They also confirm Ashforth and Mael's (1989) argument that more identification results in more support for the corporation – in this case emotional support. However, this study did not find proof for the assumption that a high corporate reputation results in a high identification with the company (Bhattacharya & Sen, 2003; Dutton et al., 1994; Keh & Xie, 2009). Nevertheless, these results suggest the consideration of person-company fit in crisis communication and SCCT.

Finally, following Kiambi and Shafer's (2015) suggestion of comparing victims and non-victims of a crisis, this study performed a comparison between participants who were affected by the emissions scandal and those who were not affected. It was found that crisis responsibility increased the level of anger more among affected publics compared to non-affected publics. Furthermore, anger had a stronger negative effect on the perceived post-crisis reputation of the VW Group and a stronger positive effect on the respondents' intention to express NWOM among
the affected participants. Thus, anger lead to more negative crisis outcomes among the affected persons than among the general public. Assuming that affected people regarded the emissions scandal as more self-related (Celsi & Olson, 1988) and thus evaluated it as more personally relevant, it seems plausible that their anger also had more severe negative outcomes than for people who were not affected. This result particularly emphasizes that different groups of stakeholders can react differently to a crisis and that especially affected people could react more negatively to such an event.

5.2. Managerial Implications

Based on the results of this study, several practical suggestions can be made. As this study confirmed, anger plays a powerful role in a crisis. Not only did it negatively influence the participants' evaluation on the VW Group's post-crisis reputation, it also, and more strongly, increased the respondents' intention to express NWOM about the corporation. The study further found that already a low level of anger could result in these negative crisis outcomes. Moreover, this study revealed that sympathy functioned as a predictor for post-crisis reputation and NWOM intention, as well. Although corporations aim to avoid negative consequences and enhance positive outcomes of a crisis, they cannot control people’s emotions. What they can influence, though, are the driving forces of anger and sympathy.

This implies first of all, that corporations should understand and take seriously (Choi & Lin, 2009b) both emotional responses and their consequences in order to react properly to a crisis (Laufer & Coombs, 2006). In order to mitigate anger and reinforce sympathy, they should carefully communicate with their publics based on their emotional state at a certain moment. For this, corporations should constantly monitor news coverage and the public's reactions to a crisis, such as on social media platforms like Twitter and Facebook. Based on such knowledge, corporations could then identify and apply the best response to the incident (Jin, 2014). By using a proper crisis response, which for instance focuses on the well being of or caring for victims, also the attribution of crisis responsibility could be weakened. This is especially significant as crisis responsibility was found to affect the level of anger and sympathy. Thus, by reacting properly to a crisis, the usage of the right crisis response strategy could prevent the occurrence of or reduce the level of anger and enhance the level of sympathy.

Even more importantly, this study has revealed that crisis involvement is an even stronger predictor of anger than crisis responsibility and also has an impact on sympathy. Thus, when responding to an incident, corporations should consider people’s degree of involvement (Choi & Chung, 2013) and therefore adjust their responses to each group of people. Thereby, they should pay special attention to their different groups of stakeholders, such as customers or shareholders,
as they are assumed to evaluate a crisis as particularly relevant. As this study has shown, also the general public should not be forgotten, though, when responding to a crisis. Thus, public statements, for instance in the media, should be provided by the affected corporation, as well.

This study has further found evidence for the importance of a strong person-company fit for reducing anger and increasing sympathy in a crisis. Based on this study's findings, it is implied that corporations should build and manage a strong relationship not only with their stakeholders but also the general public. For this, corporations should get to know the needs and wants of different publics, for instance by conducting regular surveys. This way, corporations cannot only perform proper relationship management with publics but can also offer and communicate products and services that the publics can identify with. These could be for instance be those that do good for the environment or society, thus meeting the increasing demand for environmentally-friendly products (iwd, 2013).

Lastly, results of this study imply that corporations should be aware about the occurrence and effect of emotional responses on post-crisis reputation and NWOM intention even several months after a crisis has occurred. Thus, such corporations should not only implement such actions right after a crisis has happened but also in the long term.

5.3. Conclusion
The aim of this thesis was to explore crisis outcomes of the VW emissions scandal, analyze the impact of personal perspectives on these outcomes as well as compare these relationships between affected and non-affected publics. Thereby, this study focused on the German public’s evaluation of the VW Group’s post-crisis reputation and their intention to use NWOM. Applying the SCCT as groundwork and extending the framework with the concepts of crisis involvement and person-company fit, as well as the link between emotions (i.e. anger and sympathy) and post-crisis reputation, this thesis examined the role of crisis responsibility, crisis involvement, emotions and person-company fit in the crisis context. As the VW Group had a good pre-crisis reputation and a high relevance as a car manufacturer especially in Germany, the VW emissions scandal was evaluated as particularly relevant in this country. Thus, a survey among the German public was conducted for the purpose of this study. Both, the high number of participants ($N=2072$) and the high response rate (72.91 %) of this survey confirmed the relevance of the emissions scandal for Germans.

This study has shown that all of the concepts played an important role in the tested relationships. Findings revealed that the respondents evaluated the VW Group’s post-crisis reputation only on a modest level, leading to the assumption that the corporation did not maintain its favorable reputation after the crisis. The study further found that the respondents’ NWOM
intention was rather low after the crisis. Thus, it was supposed that the VW Group’s favorable prior reputation could have saved the corporation from being confronted with a higher level of NWOM. Besides, this study confirmed the effects of emotions in the emissions scandal on crisis outcomes. While anger led to a more negative perception of post-crisis reputation and to a higher intention to use NWOM, sympathy resulted in a more favorable post-crisis reputation and a lower intention to use NWOM about the VW Group. Hence, evidence was found for the in SCCT existent link between emotions and NWOM intention but also for the proposed link between emotions and post-crisis reputation. Moreover, the significance of the two emotional responses was even more emphasized by proving its mediating roles in the relationships between crisis responsibility and crisis involvement with post-crisis reputation and NWOM intention. Thereby, anger was found to be a stronger mediator, highlighting the relevance of this negative affect in a crisis. However, sympathy was also shown to be important in predicting crisis outcomes, thus confirming its proposed relevance in the crisis.

Furthermore, this study not only confirmed the crucial role of crisis responsibility but also that of crisis involvement as a predictor for emotions: Both concepts increased the level of anger and decreased the level of sympathy among the respondents. Hence, it was proven that crisis involvement, which is a rather new concept in the context of corporate crises, is a relevant predictor for crisis emotions, as well. Besides testing the extension of the SCCT framework with crisis involvement, this study also included the concept of person-company fit. According to the findings, person-company fit moderated the links between crisis responsibility and both emotions as well as between crisis involvement and anger. Thereby, a stronger identification with the VW Group resulted in more sympathy and less anger. Finally, the comparison of all effects among affected and non-affected publics showed that crisis responsibility resulted in more anger among the affected public compared to the non-affected public. In addition, the impact of anger was stronger among the affected than among the non-affected German public, while no difference was observed regarding sympathy.

Hence, having confirmed eleven of the twelve posed hypotheses, this study not only found evidence for existing paths of the SCCT framework but also for the proposed extensions (i.e. the link between emotions and post-crisis reputation, as well as the incorporation of involvement and person-company fit). Thus, great value was added to crisis communication research by validating the framework for this real crisis scenario.

5.4. **Strengths and Limitations**

This study added value to existing crisis communication research for several reasons. Firstly, it not only found evidence for existing paths of the SCCT but also for proposed extensions when
testing the framework in a real crisis scenario. Thereby, this study not only met the call for research by examining the personal perspectives emotions and involvement in a crisis. It also confirmed the impact of both emotions (i.e. anger and sympathy) on post-crisis reputation and the significant role of crisis involvement as a predictor for emotional responses. Thus, not only product involvement, as proposed by Choi and Lin (2013), but also crisis involvement, was found to be important when studying crisis emotions and should be incorporated in the SCCT. Next to this, this study applied person-company fit to the organizational crisis context and found evidence for its impact on emotions.

In addition, the VW emissions scandal constituted a significant case to study. It enabled the investigation of a severe and international product recall crisis outside of the United States. By analyzing this crisis, the artificiality of a fictitious organization and/or crisis was avoided. Moreover, and more importantly the comparison of effects between affected and non-affected groups was enabled and it was revealed that anger had a stronger impact on crisis outcomes among affected persons. In addition to this, the present study contributed to existing research by applying a quantitative survey method, thus going beyond case study research, which had been dominating the field of crisis communication. In this context, the high number of participants should be mentioned that enabled the application of SEM for the data analysis.

Despite these strengths and the encouraging results of this study, certain limitations should be taken into consideration when interpreting these findings. First of all, the study at hand only measured the VW Group's reputation after the crisis but not that before the occurrence of the emissions scandal. Although several sources agree on the VW Group's favorable reputation before the crisis, no reputation loss could be explicitly be detected based on this study's results. Moreover, the post-crisis reputation was only measured once and thus the dynamic of the concept of reputation was not considered. However, an organization’s reputation develops over time and can change quickly due to the appearance of new evidence (Choi & Chung, 2013). In this context, it has to be considered that this study was conducted about half a year after the first information on the emissions scandal was disclosed. This could have had an effect on the evaluation of the perception of the post-crisis reputation as well as on the other relevant concepts of this study, meaning for instance that the reputation had already recovered or the level of anger had already decreased due to the time passed.

Furthermore, this study applied SCCT but did not include all elements of the framework. For instance, it did not consider crisis response strategies that were used by the VW Group to react to the crisis or the VW Group's crisis history. These are important factors, though, when evaluating crisis outcomes (see chapter 2.6.).
Another limitation of this is the way, in which person-company fit was included in the study. Firstly, as mentioned in chapter 5.1.1., it could have been difficult for the respondents to evaluate their identification with the VW Group because it is a large corporation with several brands and products. People might rather identify themselves with a brand or product though, instead with such a large entity. Secondly, the scale that was used to measure person-company fit included some items that were difficult to answer by respondents because they initially stem from the concept of employer-employee identification. As several respondents left a comment about this difficulty of answering in the feedback field in the end of the survey, it is supposed that this problem had occurred.

Next to this, the model fit of the structural model was only acceptable and not as high as desired. This has to be considered when interpreting the results of this study. Finally, some limitations are a result of the choice of method and sampling method that was used for the data collection. Although survey methods have the strength to measure people’s opinions and behaviors, it is debatable whether they are the best method to measure emotions as well. Moreover, it should be considered that due to the self-reporting in a survey, some people could have the tendency to answer in a socially desirable manner. As a result of the usage of purposive sampling and the self-selection of respondents, no representative sample could be achieved. Instead, the sample consists of mostly young and highly educated respondents while older and lower educated parts of the German population are under-represented. This bias needs to be taken into consideration when interpreting the results of this study.

5.5. Future Research

As the VW emissions scandal originated in the United States and evolved into an international crisis, it would be worthwhile to replicate the present study in the United States. Conducting the same study in another country that was affected by the emissions scandal would also shed more light into the meaning of both the VW Group and the emissions scandal for Germany and other countries. Only when comparing results from a German sample with that of other nationalities, the full significance of this study’s results would become clear. In addition, the VW emissions scandal constitutes a suitable case for a long-term study. By repeating the same survey in Germany after some time, valuable knowledge about the long-term crisis outcomes could be gained. Based on this, suggestions corporations on how to handle a crisis in the long run could be given.

Moreover, future studies on the VW emissions scandal could include other independent or dependent variables that have not been considered in the present study. For instance, other behavioral intentions that are of interest for organizations, such as the intention to re-purchase a
product or the boycott of a corporation, could be incorporated. In addition to this, the crisis history and crisis response strategies that were used by the VW Group could be investigated, for instance, regarding their impact on the corporation’s post-crisis reputation. In this context, the role of the VW Group’s former CEO Martin Winterkorn would be an aspect worth considering. As previous research has shown, defensive crisis response and CEO visibility in immediate crisis response was the most efficient for generating the most positive attitude and most positive purchase intention in a crisis (Turk et al., 2012).

The present study has found evidence for the significant role of involvement in a crisis. Since the concept is still new in both crisis communication research and the SCCT framework, though, prospective research should continue to investigate crisis involvement in this context. Additionally, in previous research, involvement had been operationalized in different ways, for instance as product involvement or as crisis involvement. In order to confirm the importance of this concept and the results of this study, more consistent research is necessary. The same applies for person-company fit. The study at hand introduced the concept as an influencing factor on emotions in a crisis. Although, this relationship could be confirmed to a large extent in this study, future research should continue to explore person-company fit and its effects on emotions and crisis outcomes, such as purchase intention, in organizational crises.

Finally, in order to gain a representative sample and thus generalizable results, this study should be replicated using a non-purposive sampling method, such as quota sampling. This would enable the inclusion of individuals with certain relevant characteristics in the sample and hence a less biased sample (Möhring & Schlütz, 2010).
References


http://www.volkswagenag.com/content/vwcorp/content/en/the_group.html


Sehr geehrte Teilnehmerin, sehr geehrter Teilnehmer,

vielen Dank, dass Sie sich dazu bereit erklärt haben, an meiner Umfrage über den Volkswagen Konzern (im Folgenden: VW Konzern) teilzunehmen. Der VW Konzern umfasst unter anderem die Automarken VW, Audi, Seat, Skoda, Lamborghini und Porsche.


Sollten Sie Fragen haben oder an den Ergebnissen der Studie interessiert sein, können Sie mich gerne unter 437075lw@student.eur.nl kontaktieren.

Vielen Dank im Voraus für Ihre Teilnahme.
Louisa Wanjek
Erasmus Universität Rotterdam

437075lw@student.eur.nl

___

1. Zuallererst würde ich gerne von Ihnen wissen, ob Sie jemals vom VW Konzern gehört haben?
   □ ja  □ nein

2. Menschen können ganz unterschiedliche Meinungen gegenüber dem VW Konzern haben. Wie ist es bei Ihnen, wie sehr stimmen Sie den folgenden Aussagen zu?
   Bitte ordnen Sie sich für jede Aussage auf der Skala zwischen 1 bis 7 ein, wobei 1 „stimme überhaupt nicht zu“ und 7 „stimme voll und ganz zu“ bedeuten. Mit den Ziffern dazwischen können Sie Ihre Meinung abstufen.

   Ich identifiziere mich stark mit dem VW Konzern, wenn ich mit anderen darüber spreche.  1 □ □ □ □ □ □ □ □ 7
   Ich bevorzuge Autos vom VW Konzern, wenn ich sie mit denen von anderen Automobilherstellern vergliche.  1 □ □ □ □ □ □ □ □ 7
   Ich stehe dem Unternehmensimage vom VW Konzern positiv gegenüber.  1 □ □ □ □ □ □ □ □ 7
Wenn jemand den VW Konzern kritisiert, fühlt es sich für mich wie eine persönliche Beleidigung an.
Ich bin sehr daran interessiert, was andere über den VW Konzern denken.
Erfolge des VW Konzerns fühlen sich an wie meine eigenen Erfolge.
Wenn jemand den VW Konzern lobt, empfinde ich es als persönliches Kompliment.
Wenn der VW Konzern in den Medien kritisiert wird, ist es mir peinlich.


Die folgenden Fragen beziehen sich auf Ihre Meinung über den VW Konzern nachdem die Informationen über den Abgasskandal öffentlich wurden.

3. **Haben Sie jemals vom VW-Abgasskandal gehört?**
   □ ja □ nein

4. **Besitzen Sie derzeit ein Auto der Marken VW, Audi, Seat, Skoda oder Porsche? (Filter)**
   □ ja □ nein

5. **Ist Ihr Auto / mindestens eins Ihrer Autos vom Abgasskandal betroffen? Mit betroffen ist gemeint, dass es zu den Automodellen der Marken VW, Audi, Seat, Skoda oder Porsche gehört, die vom VW Konzern in die Werkstatt zurückgerufen wurden.**
   □ ja □ nein □ Weiß nicht

6. **Die folgenden Aussagen betreffen Ihren Eindruck vom VW Konzern und dem Abgasskandal. Wie sehr stimmen Sie diesen Aussagen zu?**
   Bitte ordnen Sie sich für jede Aussage auf der Skala zwischen 1 bis 7 ein, wobei 1 „stimme überhaupt nicht zu“ und 7 „stimme voll und ganz zu“ bedeuten. Mit den Ziffern dazwischen können Sie Ihre Meinung abstufen.

   Bezuglich des Abgasskandals ist der VW Konzern besorgt um das Wohl seiner Anspruchsgruppen (z.B. Kunden, Mitarbeiter, Investoren).
   Der VW Konzern ist in Bezug auf den Abgasskandal im Grunde unehrlich.
Ich traue dem VW Konzern nicht zu, die Wahrheit über den Abgasskandal zu erzählen. 1 □ □ □ □ □ □ □ □ □ 7
Ich würde unter den meisten Umständen wahrscheinlich glauben, was der VW Konzern über den Abgasskandal sagt. 1 □ □ □ □ □ □ □ □ □ □ 7
Bezüglich des Abgasskandals ist der VW Konzern nicht besorgt um das Wohl seiner Anspruchsgruppen (z.B. Kunden, Mitarbeiter, Investoren).


Bitte ordnen Sie sich für jede Aussage auf der Skala zwischen 1 bis 7 ein, wobei 1 „stimme überhaupt nicht zu“ und 7 „stimme voll und ganz zu“ bedeuten. Mit den Ziffern dazwischen können Sie Ihre Meinung abstufen.

Ich würde Freunde oder Verwandte ermutigen, aufgrund des Abgasskandals keine Autos vom VW Konzern zu kaufen. 1 □ □ □ □ □ □ □ □ □ □ 7
Wegen des Abgasskandals würde ich zu anderen Leuten negative Dinge über den VW Konzern und dessen Autos sagen. 1 □ □ □ □ □ □ □ □ □ □ 7
Ich würde jemandem, der nach meinem Rat fragt, auch nach dem Abgasskandal Autos vom VW Konzern empfehlen. 1 □ □ □ □ □ □ □ □ □ □ 7

8. Wenn Sie an den Abgasskandal denken, was empfinden Sie gegenüber dem VW Konzern?

Bitte ordnen Sie Ihr Empfinden gegenüber dem VW Konzern mit den folgenden Adjektiven auf der Skala zwischen 1 und 7 ein. Dabei bedeutet 1 „überhaupt nicht“ und 7 „sehr“. Mit den Ziffern dazwischen können Sie Ihr Empfinden abstufen.

Wenn ich an den VW Konzern und den Abgasskandal denke, bin ich...

wütend überhaupt nicht 1 □ □ □ □ □ □ □ □ □ □ 7 sehr
verärgert überhaupt nicht 1 □ □ □ □ □ □ □ □ □ □ 7 sehr
angewidert überhaupt nicht 1 □ □ □ □ □ □ □ □ □ □ 7 sehr
empört überhaupt nicht 1 □ □ □ □ □ □ □ □ □ □ 7 sehr

Wenn ich an den VW Konzern und den Abgasskandal denke, empfinde ich...

Verständnis überhaupt nicht 1 □ □ □ □ □ □ □ □ □ □ 7 sehr
Mitleid überhaupt nicht 1 □ □ □ □ □ □ □ □ □ □ 7 sehr
Mitgefühl überhaupt nicht 1 □ □ □ □ □ □ □ □ □ □ 7 sehr
Sympathie überhaupt nicht 1 □ □ □ □ □ □ □ □ □ □ 7 sehr

9. Was denken Sie über den Abgasskandal selbst?

Bitte bewerten Sie Ihre Einstellung gegenüber dem Abgasskandal mit den folgenden Aussagen.
Der Abgasskandal (ist)...
unwichtig □ □ □ □ □ □ □ □ □ □ wichtig □ □ □ □ □ □ □ □ □ □
nicht besorgniserregend □ □ □ □ □ □ □ □ □ □ besorgniserregend □ □ □ □ □ □ □ □ □ □
bedeutet mir nichts □ □ □ □ □ □ □ □ □ □ bedeutet mir viel □ □ □ □ □ □ □ □ □ □
spielt keine Rolle für mich □ □ □ □ □ □ □ □ □ □ spielt eine Rolle für mich □ □ □ □ □ □ □ □ □ □
irrelevant □ □ □ □ □ □ □ □ □ □ relevant □ □ □ □ □ □ □ □ □ □

10. Wie sehr stimmen Sie den folgenden Aussagen zu?
Bitte ordnen Sie sich für jede Aussage auf der Skala zwischen 1 bis 7 ein, wobei 1 „stimme überhaupt nicht zu“ und 7 „stimme voll und ganz zu“ bedeuten. Mit den Ziffern dazwischen können Sie Ihre Meinung abstufen.

Der Auslöser für den Abgasskandal war eine vorsätzliche Handlung von jemandem im Konzern.
1 □ □ □ □ □ □ □ □ □ □ 7

Jemand im Konzern hat die Ursache für den Abgasskandal wissentlich herbeigeführt.
1 □ □ □ □ □ □ □ □ □ □ 7

Der Konzern hatte die Fähigkeit, das Auftreten des Abgasskandals zu stoppen.
1 □ □ □ □ □ □ □ □ □ □ 7

Der Abgasskandal war vom Konzern vermeidbar.
1 □ □ □ □ □ □ □ □ □ □ 7

Der Konzern hätte den Abgasskandal vermeiden können.
1 □ □ □ □ □ □ □ □ □ □ 7

Der Konzern sollte für den Abgasskandal zur Verantwortung gezogen werden.
1 □ □ □ □ □ □ □ □ □ □ 7

Der Abgasskandal wurde durch eine Schwäche in der Organisation verursacht.
1 □ □ □ □ □ □ □ □ □ □ 7

Interne organisatorische Probleme haben zum Abgasskandal beigetragen.
1 □ □ □ □ □ □ □ □ □ □ 7

11. Zum Abschluss möchte ich Sie bitten noch ein paar Angaben zu Ihrer Person zu machen.

11.1. Bitte geben Sie Ihr Geschlecht an:
□ weiblich
□ männlich

11.2. Wie alt sind Sie? Bitte geben Sie Ihr Alter in Jahren an:
___ Jahre

11.3. Was ist Ihr höchster Bildungsabschluss?
□ (noch) kein Abschluss
□ Hauptschulabschluss (Volksschulabschluss)
□ Realschulabschluss (Mittlere Reife)
□ Abitur / (Fach-)Hochschulreife
□ (Fach-)Hochschulabschluss
□ Andere, und zwar: ____________________
11.4. Was ist Ihre Nationalität?
□ Deutsch
□ Andere, und zwar: ____________________

Damit sind Sie nun am Ende der Befragung angekommen.
Falls Sie noch Anmerkungen oder Kritik haben, können Sie gerne noch folgendes Feld ausfüllen.

Ende
Vielen Dank noch einmal für Ihre Teilnahme und Ihrer Unterstützung bei meiner Abschlussarbeit! Ich würde mich freuen, wenn Sie den untenstehenden Link zu meiner Umfrage noch an Ihre Familie, Freunde, Bekannte oder Kollegen weiterleiten würden. Je mehr Personen an meiner Umfrage teilnehmen, desto aussagekräftiger sind die Ergebnisse meiner Studie.

https://erasmushcc.qualtrics.com/SE/?SID=SV_a9MJdOahXuuae4B

Sollten Sie Fragen zu meiner Studie haben oder an den Ergebnissen interessiert sein, können Sie mich gerne unter 437075lw@student.eur.nl kontaktieren. Eine Zuordnung Ihrer E-Mail-Adresse mit den Angaben im Fragebogen ist nicht möglich.

Beste Grüße
Louisa Wanjek
Appendix A2 - Questionnaire English

Dear participant,

thank you very much for taking part in this survey about the Volkswagen Group (following: VW Group). The VW Group comprises among others the brands VW, Audi, Seat, Skoda, Lamborghini and Porsche.

The survey is part of my Masters Thesis at the School of History, Culture and Communication of the Erasmus University Rotterdam. Thus, this survey does not have any commercial interest and the results are only used for scientific purposes. The questionnaire will take about 10 minutes. There are no right and wrong answers - I am simply interested in your attitudes and opinions towards the VW Group. All of your answers will be completely anonymous and treated confidentially. Your participation would help me very much.

If you have any questions or if you are interested in the results of my study, please do not hesitate to contact me (437075lw@student.eur.nl).

Thank you in advance for your participation.
Louisa Wanjek
Erasmus University Rotterdam
437075lw@student.eur.nl

---

1. First of all, I would like to know if you have ever heard of the VW Group?
   □ yes □ no

2. Persons can have very different opinions about the VW Group. How about you, how much do you agree with the following statements?
   Please rate how much you agree with the statements on a scale from 1 to 7, whereas 1 means that you “strongly disagree” and 7 means that you “strongly agree”. With the numbers in between, you can graduate your opinion.

   I have strong identification with the VW Group when talking to others about it. 1 □ □ □ □ □ □ □ 7
   I prefer cars of the VW Group when comparing it with that of other automobile manufacturers. 1 □ □ □ □ □ □ □ 7
   I am positive about the company image of the VW Group. 1 □ □ □ □ □ □ □ 7
   When someone criticizes the VW Group, it feels like a personal insult. 1 □ □ □ □ □ □ □ 7
   I am very interested in what others think about VW Group. 1 □ □ □ □ □ □ □ 7
   The successes of the VW Group are my successes. 1 □ □ □ □ □ □ □ 7
   When someone praises the VW Group, it feels like a personal compliment. 1 □ □ □ □ □ □ □ 7
If a story in the media criticizes the VW Group, I feel embarrassed.  

As you may have heard, the VW Group has admitted to have intentionally manipulated engines of diesel cars to increase their performance on emission, when being tested. Since September 2015, about 11 million cars of the brands VW, Audi, Seat, Skoda and Porsche have been affected. This incident is often referred to as the “emissions scandal”.

The following questions will ask your opinion about the VW Group after the information about this “emissions scandal” has been revealed.

3. Have you ever heard of the VW emissions scandal?
   □ yes □ no

4. Do you currently own a car of the brands VW, Audi, Seat, Skoda or Porsche?
   □ yes □ no

5. Has your car / at least one of your cars been affected by the “emissions scandal”?  
   With affected it is meant that your car belongs to those of the brands VW, Audi, Seat, Skoda or Porsche that have been recalled by VW.  
   □ yes □ no □ don’t know

6. The items below concern your impression of the VW Group and the “emissions scandal”. How much do you agree or disagree with these statements?  
   Please rate how much you agree with the statements on a scale from 1 to 7, whereas 1 means that you “strongly disagree” and 7 means that you “strongly agree”. With the numbers in between, you can graduate your opinion.

   Regarding the emissions scandal, the VW Group is concerned with the well-being of its publics (e.g. customers, employees, investors).  
   The VW Group is basically dishonest concerning the emissions scandal.  
   I do not trust the VW Group to tell the truth about the emissions scandal.  
   Under most circumstances, I would be likely to believe what the VW Group says about the emissions scandal.  
   Regarding the emissions scandal, the VW Group is not concerned with the well-being of its publics (e.g. customers, employees, investors).  

   1 □ □ □ □ □ □ □ 7
7. To what degree do you agree with the following items? Please think again of the VW Group in the context of the emissions scandal.

Please rate your agreement with the statements on a scale from 1 to 7, whereas 1 means that you "strongly disagree" and 7 means that you "strongly agree". With the numbers in between, you can graduate your opinion.

I would encourage friends or relatives not to buy cars from the VW Group because of the emissions scandal.

Because of the emissions scandal, I would say negative things about the VW Group and its cars to other people.

Even after the emissions scandal, I would recommend cars of the VW Group to someone who asked my advice.

8. How do you feel about the VW Group due to the “emissions scandal”?

For each adjective below, please rate your feelings towards the VW Group on a scale from 1 to 7, whereas 1 means “not at all” and 7 means “very much”. With the numbers in between, you can graduate your feelings.

When I think of the VW Group and the emissions scandal, I feel...

- angry: not at all □ □ □ □ □ □ □ □ 7 very much
- annoyed: not at all □ □ □ □ □ □ □ □ 7 very much
- disgusted: not at all □ □ □ □ □ □ □ □ 7 very much
- outraged: not at all □ □ □ □ □ □ □ □ 7 very much

When I think of the VW Group and the emissions scandal, I feel...

- sympathetic: not at all □ □ □ □ □ □ □ □ 7 very much
- sorry: not at all □ □ □ □ □ □ □ □ 7 very much
- compassion: not at all □ □ □ □ □ □ □ □ 7 very much
- empathy: not at all □ □ □ □ □ □ □ □ 7 very much

9. What do you think of the emissions scandal itself?

Please rate your attitude towards the emissions scandal with the following items.

The emissions scandal is...

- unimportant      □ □ □ □ □ □ □ □       important
- of no concern    □ □ □ □ □ □ □ □       of concern
- means nothing    □ □ □ □ □ □ □ □       means a lot
- does not matter  □ □ □ □ □ □ □ □       matters to me
- irrelevant       □ □ □ □ □ □ □ □       relevant

10. How much do you agree or disagree with the following items?

Please rate how much you agree with the statements on a scale from 1 to 7, whereas 1 means that you “strongly disagree” and 7 means that you “strongly agree”. With the numbers in between, you can graduate your opinion.
The cause of the emissions scandal was an intentional act by someone in the organization.  
Someone in the organization knowingly created the cause of the emissions scandal.  
The organization had the capability to stop the emissions scandal from occurring.  
The emissions scandal was preventable by the organization.  
The organization could have avoided the emissions scandal.  
The organization should be held accountable for the emissions scandal.  
The emissions scandal was caused by a weakness in the organization.  
Internal organizational issues contributed to the emissions scandal.  

11. Finally, I would like to ask you to provide some general information about yourself.  
11.1. Please indicate your gender:  
☐ Female  
☐ Male  

11.2. How old are you? Please, indicate your age in years:  
___ years  

1.1. What is your highest level of education achieved?  
☐ I have not yet completed High School  
☐ High School Diploma (lowest)  
☐ High School Diploma (middle)  
☐ High School Diploma (highest)  
☐ University Degree  
☐ Other: ____________________  

1.2. What is your Nationality?  
☐ German  
☐ Other: ____________________  

Feedback  
You have reached the end of the survey.  
If you have any further comments or suggestions on the questionnaire, please let me know by filling in the following field.
The End
Thank you again for your participation and supporting my Master's thesis! I would be glad if you sent the following link of the survey to your family, friends or colleagues. The more people participate in my survey, the more informative will be the results of my study.

https://erasmushcc.qualtrics.com/SE/?SID=SV_a9MJd0ahXuuae4B

If you have any questions about my study or are interested in the results, feel free to contact me via 437075lw@student.eur.nl. An association of your e-mail address to your statements in the questionnaire is not possible.

Kind regards,
Louisa Wanjek
Contact: 437075lw@student.eur.nl
## Appendix B – Overview of Items

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reputation1</strong></td>
<td>Regarding the emissions scandal, the VW Group is concerned with the well-being of its publics (e.g. customers, employees, investors).</td>
</tr>
<tr>
<td><strong>Reputation2</strong></td>
<td>The VW Group is basically dishonest concerning the emissions scandal.</td>
</tr>
<tr>
<td><strong>Reputation3</strong></td>
<td>I do not trust the VW Group to tell the truth about the emissions scandal.</td>
</tr>
<tr>
<td><strong>Reputation4</strong></td>
<td>Under most circumstances, I would be likely to believe what the VW Group says about the emissions scandal.</td>
</tr>
<tr>
<td><strong>Reputation5</strong></td>
<td>Regarding the emissions scandal, the VW Group is not concerned with the well-being of its publics (e.g. customers, employees, investors).</td>
</tr>
<tr>
<td><strong>NWOM1</strong></td>
<td>I would encourage friends or relatives not to buy cars from the VW Group because of the emissions scandal.</td>
</tr>
<tr>
<td><strong>NWOM2</strong></td>
<td>Because of the emissions scandal, I would say negative things about the VW Group and its cars to other people.</td>
</tr>
<tr>
<td><strong>NWOM 3</strong></td>
<td>Even after the emissions scandal, I would recommend cars of the VW Group to someone who asked my advice.</td>
</tr>
<tr>
<td><strong>Anger1</strong></td>
<td>When I think of the VW Group and the emissions scandal, I feel... angry.</td>
</tr>
<tr>
<td><strong>Anger2</strong></td>
<td>When I think of the VW Group and the emissions scandal, I feel... annoyed.</td>
</tr>
<tr>
<td><strong>Anger3</strong></td>
<td>When I think of the VW Group and the emissions scandal, I feel... disgusted.</td>
</tr>
<tr>
<td><strong>Anger4</strong></td>
<td>When I think of the VW Group and the emissions scandal, I feel... outraged.</td>
</tr>
<tr>
<td><strong>Sympathy1</strong></td>
<td>When I think of the VW Group and the emissions scandal, I feel... sympathetic.</td>
</tr>
<tr>
<td><strong>Sympathy2</strong></td>
<td>When I think of the VW Group and the emissions scandal, I feel... sorry.</td>
</tr>
<tr>
<td><strong>Sympathy3</strong></td>
<td>When I think of the VW Group and the emissions scandal, I feel... compassion.</td>
</tr>
<tr>
<td><strong>Sympathy4</strong></td>
<td>When I think of the VW Group and the emissions scandal, I feel... empathy.</td>
</tr>
<tr>
<td><strong>Involvement1</strong></td>
<td>The emissions scandal is... unimportant / important.</td>
</tr>
<tr>
<td><strong>Involvement2</strong></td>
<td>The emissions scandal is... of no concern / of concern.</td>
</tr>
<tr>
<td><strong>Involvement3</strong></td>
<td>The emissions scandal is... means nothing / means a lot.</td>
</tr>
<tr>
<td><strong>Involvement4</strong></td>
<td>The emissions scandal is... does not matter / matters to me.</td>
</tr>
<tr>
<td><strong>Involvement5</strong></td>
<td>The emissions scandal is... irrelevant / relevant.</td>
</tr>
<tr>
<td>Responsibility1</td>
<td>The cause of the emissions scandal was an intentional act by someone in the organization.</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Responsibility2</td>
<td>Someone in the organization knowingly created the cause of the emissions scandal.</td>
</tr>
<tr>
<td>Responsibility3</td>
<td>The organization had the capability to stop the emissions scandal from occurring.</td>
</tr>
<tr>
<td>Responsibility4</td>
<td>The emissions scandal was preventable by the organization.</td>
</tr>
<tr>
<td>Responsibility5</td>
<td>The organization could have avoided the emissions scandal.</td>
</tr>
<tr>
<td>Responsibility6</td>
<td>The organization should be held accountable for the emissions scandal.</td>
</tr>
<tr>
<td>Responsibility7</td>
<td>The emissions scandal was caused by a weakness in the organization.</td>
</tr>
<tr>
<td>Responsibility8</td>
<td>Internal organizational issues contributed to the emissions scandal.</td>
</tr>
<tr>
<td>PCFit1</td>
<td>I have strong identification with the VW Group when talking to others about it.</td>
</tr>
<tr>
<td>PCFit2</td>
<td>I prefer cars of the VW Group when comparing it with that of other automobile manufacturers.</td>
</tr>
<tr>
<td>PCFit3</td>
<td>I am positive about the company image of the VW Group.</td>
</tr>
<tr>
<td>PCFit4</td>
<td>When someone criticizes the VW Group, it feels like a personal insult.</td>
</tr>
<tr>
<td>PCFit5</td>
<td>I am very interested in what others think about VW Group.</td>
</tr>
<tr>
<td>PCFit6</td>
<td>The successes of the VW Group are my successes.</td>
</tr>
<tr>
<td>PCFit7</td>
<td>When someone praises the VW Group, it feels like a personal compliment.</td>
</tr>
<tr>
<td>PCFit8</td>
<td>If a story in the media criticizes the VW Group, I feel embarrassed.</td>
</tr>
</tbody>
</table>
### Appendix C – Further Tables

#### Table B1: Correlation Matrix Post-Crisis Reputation

<table>
<thead>
<tr>
<th>Reputation1</th>
<th>Reputation2</th>
<th>Reputation3</th>
<th>Reputation4</th>
<th>Reputation5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation1</td>
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</tr>
<tr>
<td>Reputation2</td>
<td>.29**</td>
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<tr>
<td>Reputation3</td>
<td>.31**</td>
<td>.58**</td>
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<tr>
<td>Reputation4</td>
<td>.40**</td>
<td>.43**</td>
<td>.55**</td>
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</tr>
<tr>
<td>Reputation5</td>
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<td>.39**</td>
<td>.49**</td>
<td>.34**</td>
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*Note: *p* ≤ .05, **p* ≤ .01; Sample size = 1475; Pearson Correlation

#### Table B2: Correlation Matrix NWOM

<table>
<thead>
<tr>
<th>NWOM1</th>
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<tbody>
<tr>
<td>NWOM1</td>
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<td></td>
</tr>
<tr>
<td>NWOM2</td>
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</tr>
<tr>
<td>NWOM3</td>
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<td>.44**</td>
</tr>
</tbody>
</table>

*Note: *p* ≤ .05, **p* ≤ .01; Sample size = 1475; Pearson Correlation

#### Table B3: Correlation Matrix Anger

<table>
<thead>
<tr>
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<th>Anger3</th>
<th>Anger4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger2</td>
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<td>Anger3</td>
<td>.59**</td>
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<td>Anger4</td>
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*Note: *p* ≤ .05, **p* ≤ .01; Sample size = 1475; Pearson Correlation

#### Table B4: Correlation Matrix Sympathy

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</thead>
<tbody>
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<td>Sympathy3</td>
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<tr>
<td>Sympathy4</td>
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*Note: *p* ≤ .05, **p* ≤ .01; Sample size = 1475; Pearson Correlation
### Table B5: Correlation Matrix Involvement

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<tr>
<td>Involvement 1</td>
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<td>.63**</td>
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</tr>
<tr>
<td>Involvement 2</td>
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<td>.52**</td>
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<tr>
<td>Involvement 3</td>
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</tr>
<tr>
<td>Involvement 4</td>
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<td>.52**</td>
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<tr>
<td>Involvement 5</td>
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</table>

*Note: *p ≤ .05, **p ≤ .01; Sample size = 1475; Pearson Correlation

### Table B6: Correlation Matrix Crisis Responsibility

<table>
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<tr>
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<th>Resp1</th>
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<th>Resp3</th>
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<th>Resp5</th>
<th>Resp6</th>
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<tbody>
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<td></td>
<td></td>
</tr>
<tr>
<td>Resp5</td>
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</tr>
<tr>
<td>Resp6</td>
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<td>.22**</td>
<td>.21**</td>
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<td>.09**</td>
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<tr>
<td>Resp8</td>
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*Note: *p ≤ .05, **p ≤ .01; Sample size = 1475; Pearson Correlation

### Table B7: Correlation Matrix PC Fit

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<th></th>
<th>PC_Fit1</th>
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<th>PC_Fit3</th>
<th>PC_Fit4</th>
<th>PC_Fit5</th>
<th>PC_Fit6</th>
<th>PC_Fit7</th>
<th>PC_Fit8</th>
</tr>
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<td>PC_Fit2</td>
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<td>PC_Fit3</td>
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</tr>
<tr>
<td>PC_Fit6</td>
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<tr>
<td>PC_Fit8</td>
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</table>

*Note: *p ≤ .05, **p ≤ .01; Sample size = 1475; Pearson Correlation
**Table B8: Exploratory Factor Analysis Post-Crisis Reputation**

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regarding the emissions scandal, the VW Group is concerned with the well-being of its publics (e.g. customers, employees, investors). (Reputation1)</td>
<td>.651</td>
</tr>
<tr>
<td>The VW Group is basically dishonest concerning the emissions scandal. (Reputation2)</td>
<td>.636</td>
</tr>
<tr>
<td>I do not trust the VW Group to tell the truth about the emissions scandal. (Reputation3)</td>
<td>.691</td>
</tr>
<tr>
<td>Under most circumstances, I would be likely to believe what the VW Group says about the emissions scandal. (Reputation4)</td>
<td>.640</td>
</tr>
<tr>
<td>Regarding the emissions scandal, the VW Group is not concerned with the well-being of its publics (e.g. customers, employees, investors). (Reputation5)</td>
<td>.694</td>
</tr>
<tr>
<td><strong>Cronbach’s Alpha</strong></td>
<td>.795</td>
</tr>
<tr>
<td><strong>Eigenvalue</strong></td>
<td>2.196</td>
</tr>
<tr>
<td><strong>% of Variance</strong></td>
<td>43.93</td>
</tr>
</tbody>
</table>

*Note: Maximum Likelihood with Varimax rotation was applied; KMO=.706; factor loadings below .4 are not included in the table*

**Table B9: Exploratory Factor NWOM**

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would encourage friends or relatives not to buy cars from the VW Group because of the emissions scandal. (NWOM1)</td>
<td>.904</td>
</tr>
<tr>
<td>Because of the emissions scandal, I would say negative things about the VW Group and its cars to other people. (NWOM2)</td>
<td>.707</td>
</tr>
<tr>
<td>Even after the emissions scandal, I would recommend cars of the VW Group to someone who asked my advice. (NWOM3)</td>
<td>.627</td>
</tr>
<tr>
<td><strong>Cronbach’s Alpha</strong></td>
<td>.780</td>
</tr>
<tr>
<td><strong>Eigenvalue</strong></td>
<td>1.708</td>
</tr>
<tr>
<td><strong>% of Variance</strong></td>
<td>56.94</td>
</tr>
</tbody>
</table>

*Note: Maximum Likelihood with Varimax rotation was applied; KMO=.667; factor loadings below .4 are not included in the table*
### Table B10: Exploratory Factor Analysis Crisis Responsibility

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>The emissions scandal was preventable by the organization. (Responsibility4)</td>
<td>.803</td>
</tr>
<tr>
<td>The organization could have avoided the emissions scandal. (Responsibility5)</td>
<td>.780</td>
</tr>
<tr>
<td>The organization had the capability to stop the emissions scandal from occurring. (Responsibility3)</td>
<td>.423</td>
</tr>
<tr>
<td>The organization should be held accountable for the emissions scandal. (Responsibility6)</td>
<td>.397</td>
</tr>
<tr>
<td>The emissions scandal was caused by a weakness in the organization. (Responsibility7)</td>
<td>.905</td>
</tr>
<tr>
<td>Internal organizational issues contributed to the emissions scandal. (Responsibility8)</td>
<td>.646</td>
</tr>
<tr>
<td>Someone in the organization knowingly created the cause of the emissions scandal. (Responsibility2)</td>
<td></td>
</tr>
<tr>
<td>The cause of the emissions scandal was an intentional act by someone in the organization. (Responsibility1)</td>
<td>.691</td>
</tr>
</tbody>
</table>

| Cronbach’s Alpha | .686 | .751 | .664 |
| Eigenvalue       | 1.692 | 1.285 | 1.012 |
| % of Variance    | 21.16 | 16.06 | 12.66 |

**Note:** Maximum Likelihood with Varimax rotation was applied; KMO=.704; factor loadings below .4 are not included in the table
### Table B11: Exploratory Factor Analysis Crisis Involvement

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>The emissions scandal is unimportant/important (Involvement1)</td>
<td>.869</td>
</tr>
<tr>
<td>The emissions scandal is irrelevant/relevant (Involvement5)</td>
<td>.856</td>
</tr>
<tr>
<td>The emissions scandal is of no concern/of concern (Involvement2)</td>
<td>.730</td>
</tr>
<tr>
<td>The emissions scandal means nothing/means a lot (Involvement3)</td>
<td>.709</td>
</tr>
<tr>
<td>The emissions scandal does not matter/matters to me (Involvement4)</td>
<td>.660</td>
</tr>
</tbody>
</table>

**Cronbach’s Alpha**

.852

**Eigenvalue**

2.961

**% of Variance**

59.21

*Note: Maximum Likelihood with Varimax rotation was applied; KMO=.810; factor loadings below .4 are not included in the table*

### Table B12: Exploratory Factor Analysis Anger

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I think of the VW Group and the emissions scandal, I feel angry. (Anger1)</td>
<td>.855</td>
</tr>
<tr>
<td>When I think of the VW Group and the emissions scandal, I feel annoyed. (Anger2)</td>
<td>.842</td>
</tr>
<tr>
<td>When I think of the VW Group and the emissions scandal, I feel outraged. (Anger4)</td>
<td>.752</td>
</tr>
<tr>
<td>When I think of the VW Group and the emissions scandal, I feel disgusted. (Anger3)</td>
<td>.643</td>
</tr>
</tbody>
</table>

**Cronbach’s Alpha**

.855

**Eigenvalue**

2.419

**% of Variance**

60.48

*Note: Maximum Likelihood with Varimax rotation was applied; KMO=.780; factor loadings below .4 are not included in the table*
**Table B13: Exploratory Factor Analysis Sympathy**

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I think of the VW Group and the emissions scandal, I feel compassion. (Sympathy3)</td>
<td>.908</td>
</tr>
<tr>
<td>When I think of the VW Group and the emissions scandal, I feel sorry. (Sympathy2)</td>
<td>.760</td>
</tr>
<tr>
<td>When I think of the VW Group and the emissions scandal, I feel empathy. (Sympathy4)</td>
<td>.640</td>
</tr>
<tr>
<td>When I think of the VW Group and the emissions scandal, I feel sympathetic. (Sympathy1)</td>
<td>.529</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha  
Eigenvalue  
% of Variance  

Note: Maximum Likelihood with Varimax rotation was applied; KMO=.720; factor loadings below .4 are not included in the table

**Table B14: Exploratory Factor Analysis Person-Company Fit**

<table>
<thead>
<tr>
<th>Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have strong identification with the VW Group when talking to others about it. (PC Fit1)</td>
<td>.890</td>
</tr>
<tr>
<td>When someone praises the VW Group, it feels like a personal compliment. (PC Fit7)</td>
<td>.772</td>
</tr>
<tr>
<td>I am very interested in what others think about VW Group. (PC Fit5)</td>
<td>.662</td>
</tr>
<tr>
<td>I prefer cars of the VW Group when comparing it with that of other automobile manufacturers. (PC Fit2)</td>
<td>.652</td>
</tr>
<tr>
<td>I am positive about the company image of the VW Group. (PC Fit3)</td>
<td>.558</td>
</tr>
<tr>
<td>If a story in the media criticizes the VW Group, I feel embarrassed. (PC Fit8)</td>
<td>.549</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha  
Eigenvalue  
Variance  

Note: Maximum Likelihood with Varimax rotation was applied; KMO=.831; factor loadings below .4 are not included in the table