



universität
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MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

„Anti-food-waste ambitions and their ability to dampen consumer dissatisfaction in stockout situation. An experimental approach in the grocery retail sector. “

verfasst von / submitted by

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angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of
Master of Science (MSc)

Wien, 2021 / Vienna 2021

Studienkennzahl lt. Studienblatt /
degree programme code as it appears on
the student record sheet:

UA 066 915

Studienrichtung lt. Studienblatt /
degree programme as it appears on
the student record sheet:

Masterstudium Betriebswissenschaft

Betreut von / Supervisor:

Dipl. -Ök. Dr. Christina Sichtmann, Privatdoz.

Acknowledgements

First of all, I would like to express my gratitude to my supervisor, Prof. Dr. Christina Sichtmann, who offered me guidance, motivation and support throughout the whole process. Thank you for all your expertise, trust and patience. Further, I would like to thank the whole chair of International Marketing around Univ.-Prof. Dr. Adamantios Diamantopoulos.

Special gratitude to my parents, who always encourage me to do my best and have supported me in every possible way throughout my academic career. Thank you for your caring and unconditional support and for being such good role models.

Last but not least, thank you to my closest friends and fellow students for inspiration and encouragement.

Abstract

Aim. The aim of this research was to analyze if anti-food-waste efforts have the ability to dampen consumer dissatisfaction in a stockout situation. Further, the moderating effects of self-enhancement, self-transcendence and CSR skepticism on that relationship are investigated.

Method. A web-based scenario technique was applied, and a digital survey was conducted to measure the major constructs, regarding consumer satisfaction, self-enhancement, self-transcendence and CSR skepticism. All participants were first randomly presented a scenario, either including a CSR-related anti-food-waste ambition explanation for the stockout or just the information that the product is out of stock. After that, they completed the questionnaire. The answers of 150 participants have been analyzed.

Results. The anti-food-waste justification for the stockout was found to have a significant influence on consumer satisfaction. More precisely, participants receiving the CSR-related scenario were less dissatisfied after the occurred stockout than the group receiving just the information that the product is out of stock. Significant moderating effects of self-enhancement, self-transcendence or CSR skepticism have not been found.

Conclusion. The results of this research demonstrated that anti-food-waste efforts of food retailers can dampen the dissatisfaction of consumers after a stockout situation. This offers empirical evidence that consumers value these actions of retailers and it impacts their emotional response to a stockout. The strategy of food waste reduction through reducing the abundance of supply, if applied successfully, offers the possibility to fight food waste while reducing the costs of waste disposal.

Keywords: Lebensmittelverschwendung, Food waste, stockout, OOS, Konsumentenzufriedenheit, consumer satisfaction, Corporate Social Responsibility

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List of Abbreviations

CSR.....	Corporate Social Responsibility
EU.....	European Union
EUR.....	Euro
FAO.....	Food and Agriculture Organization
FMCG.....	Fast Moving Consumer Goods
H.....	Hypothesis
IME.....	Institution of Mechanical Engineers
M.....	Mean
ns.....	not significant
OOS.....	Out of Stock
PV.....	Perceived Value
SD.....	Standard Deviation
TBL.....	Triple Bottom Line
USEPA.	United States Environmental Protection Agency

1 Introduction

Food waste is a global and increasingly important problem. In Europe alone, the amount of wasted food falls between 40 and 45 mton per year (Gustavsson et al., 2011). This does not only pose an environmental and sustainability issue (Aschemann-Witzel et al., 2018) but leads also to a substantial financial loss (Buzby & Hyman, 2012; Gustavsson et al., 2011). The 40 to 45 mtons of waste per year add up to a financial loss of 57 billion USD per year (Gustavsson et al., 2011). Therefore, researchers argue, that food waste should be made a key priority of corporate social responsibility programs (Gruber et al., 2016b).

Since the food sector has a high effect on natural resources (Genier et al., 2009), the reduction of food waste in this sector is of high importance. Unpredictable fluctuations in the food industry require manufacturers and retailers to produce and store a slight surplus to what is needed. If this surplus is wasted though, the environmental and social impacts on society happen without any form of benefit. Consequently, a sustainable food system, which works in a resource-efficient way is necessary. In the last years, retailers show higher attention regarding this problem (Cicatiello et al., 2016). Philip Clark (CEO of Tesco) declared "war on food" in an interview with the Telegraph, even if it meant to generate less revenue (Bacos et al., 2014). However, Corporate Social Responsibility (CSR) initiatives can also lead to a competitive advantage (Vahdati et al., 2015) and be rewarded by consumers (Hartmann, 2011). Further, associations like the Food Waste Reduction Alliance, the Retailers Environmental Action Program (REAP) in Europe, or the Waste and Resource Action Program in the UK have defined fighting against food waste as one of their primary goals (Bacos et al., 2014). Despite all those efforts a lot of work is still to be done.

One of many possible solutions to address the problem of food waste in the retail sector could be to reduce the abundance of supply. In the case of supermarkets the demand needs to be forecasted (Bacos et al., 2014). In the case of a wrong forecast, two situations may arise. The first option is that the forecasted demand has not occurred. In this case, the supermarket has a surplus of food that needs to be taken care of. Since retailers paid for the products they might then not be able to sell, the reduction of food waste is in their interest as well (Filimonau & Gherbin, 2017). The second option is that there has been more demand than forecasted and the supermarket is out of the requested product. This will lead to an out-of-stock (OOS) situation, where the

customer is not able to get his or her desired product. Even though the second possibility prevents food waste, it can lead to customer dissatisfaction. According to research, the lack of the desired product on the shelves can lead to different negative emotions like dissatisfaction, irritation, and frustration (Sanchez-Ruiz et al., 2018). But not only customers are negatively affected by OOS situations. Retailers, on the other hand, take the risk of upsetting loyal customers, losing a customer who cannot find the desired product for a shopping trip, or even worse losing them entirely to a competitor.

Corporations often face the problem of how to ensure both social and environmental demands on one side and stakeholder interests in profit maximization on the other side (Hahn et al., 2017; Mohr & Webb, 2005). Even though food waste is an increasing concern, there are still factors obstructing the enforcement of anti-food-waste measures, like the fear of reduced profits (Aschemann-Witzel et al., 2016). Therefore, Corporate Social Responsibility actions, which prevent food waste like for example anti-food-waste ambitions of retailers, need to be evaluated under the aspect of whether and how customers value those actions (Goebel et al., 2018). This holds true especially for marketing purposes (Aschemann-Witzel et al., 2016, 2018; Carroll & Shabana, 2010). Studies have shown, that consumers do value CSR practices in their evaluation of a company (J. Smith, 2013). Jürgen Peritz, a former member of the Executive Committee of Cop in Switzerland, argues that “customers care [about sustainability] today and will care even more tomorrow. The chance for retailers to differentiate themselves and their brand is enormous.” (Bacos et al., 2014).

To design purposeful actions, retailers need to know in detail, which actions fit the lifestyle of their target group and will, therefore, be accepted. If consumers support and accept these actions, effective strategies can be implemented by companies (Vitell, 2015).

The main goal of the master thesis on hand is to examine whether the reduction of food waste as a justification for an OOS situation can influence the satisfaction of consumers. This will not only contribute to the existing literature on CSR and consumer satisfaction but further open new ways for food retail managers to find a balance where costs can be saved without losing customers due to stockouts. Through developing and testing a model that sheds light on the influence of a CSR-related justification on a stockout situation outcomes could be applied to broader industries than just grocery stores.

Additionally, the importance of the moderating effect of human values (in this case self-enhancement vs. self-transcendence) and CSR skepticism on the relation of anti-food-waste ambitions on consumer satisfaction in an OOS situation will be examined.

To summarize, the findings of this thesis are aimed to provide deeper understanding about the relation between anti-food-waste efforts as a justification for stockouts and consumer satisfaction, while taking potential moderating effects into account. At the end of this thesis the results will be discussed and put in context with prior findings, allowing us to identify possible research gaps for future research.

After introducing the topic of research for this study in the **first chapter**, the **second chapter** introduces the theoretical background regarding food waste, OOS situations and CSR. Hereby, prior research and the current status in literature will serve as basis for the development of the conceptual framework including the formulation of the hypothesis. The empirical section of the thesis will be discussed in **chapter four**. This includes, the applied methodology, a short explanation of an experimental design, the data collection process, an overview of the composition of the respondents as well as the used measures. **Chapter five** includes the analysis and the obtained results of the data, including the results of the pre-test. In **chapter six** the findings will be discussed and put into context with prior research. Further, the implications for theory, practice and management will be discussed. **Chapter seven** will sum up the findings and offer a conclusion. In a last step chapter eight will deal with the limitations of the present study as well as recommendation for further research.

2 Theoretical Background

2.1 Food Waste

2.1.1 Definition of Food Waste

Food waste, as well as food loss, has gained more and more attention in research, as well as in the public eye over the last few years. In 2014, the European Parliament declared 2014 to be the “European year against food waste”. Further, a resolution was adopted aiming to reduce the annual waste of food by 50% until 2025 (Lanfranchi et al., 2014). But not only the EU has started to focus on food waste and loss, but also the United Nations (UN) declared food waste as a central aim in their sustainability development goals (UN, 2015). According to the Food and Agriculture Organization (FAO) food loss and food waste account for approximately a third of what is produced in the agricultural sector (FAO, 2011). The UK’s Institution of Mechanical Engineers (IME) estimates that the amount of food produced for human consumption, which is wasted, is as high as 2 billion tons a year. This is equivalent to half the worldwide produced food (Institution of Mechanical Engineers-IME, 2013). In Europe alone, 88 million tons of food per year get wasted, which is approximately 5% of the global volume (Filimonau & Gherbin, 2017).

The differentiation of food loss and food waste is highly important. While food loss refers to the loss of agricultural products during production, storage, distribution, or processing, food waste is referring to the waste of food through human action (Aschemann-Witzel et al., 2016; Bagherzadeh et al., 2014). For this thesis, the focus will be on food waste since the food in grocery stores is already in the final stage of the supply chain and meant for human consumption.

Another common distinction in terms of food waste is the differentiation between unavoidable food waste, possible avoidable food waste, and avoidable food waste (Gustavsson et al., 2011; Nordic Council of Ministers, 2011; WRAP, 2009). Avoidable food waste is food that was appropriate for human consumption and got disposed at some point. Possibly avoidable food waste refers to food which part of the consumers eat, while others do not (e.g. bread crusts), or food that could be eaten if prepared in the right way (e.g. potato skin). Unavoidable food waste are parts of food that are inedible or waste that stems from the preparation of food. Unavoidable food waste is generally not suitable for human consumption (WRAP, 2009). Considering this thesis,

the focus lays on avoidable food waste, since all food wasted in the retail sector is in principle avoidable.

Stenmarck et al. (2016, p. 7) define in their research for the FUSIONS EU Project food waste as “Fractions of “food and inedible parts of food from the food supply chain” to be recovered or disposed [...]” The FAO declares food waste as every healthy and consumable food item that is wasted, degraded, lost, or consumed by pets at any stage of the food chain, instead of being consumed by humans (FAO, 2006).

In research literature, no agreement on one definition of food waste can be observed (Bagherzadeh et al., 2014). Aschemann-Witzel (2017) defines it as the waste of food items that are set for human consumption but do not get consumed (Aschemann-Witzel et al., 2017). Lanfranchi et al. (2014) state that food waste implicates the conscious decision to reject perfectly edible food. Smil (2004) even includes food that is consumed in excess of what a person is required to eat from a nutritional perspective. He justifies this inclusion in his definition through the fact that long-term overconsumption of food leads to health-related problems like obesity. Therefore, this practice is not to be seen as sustainable and is to be considered as a part of food waste and food loss. In this thesis, the definition of Aschemann-Witzel will be used, as it is easy to understand and includes the relevant point of an unutilized surplus.

2.1.2 Consequences of Food Waste

Food waste is a newly arisen problem of the 20th century. Previously, food security was an unknown concept and people simply could not afford to waste food. According to Parfitt et al. (2010, p. 3078), several reasons for this change need to be taken into account: “[...] consumers’ low price of food relative to disposable income, consumers’ high expectations of food cosmetic standards and the increasing disconnection between consumers and how food is produced.”

Food waste is an environmental as well as social issue. The environmental aspect mostly derives from the fact that to produce the food, which is later wasted, scarce resources are used for production, transportation and the preparation of the food (Aschemann-Witzel et al., 2016). Freshwater, fossil fuels and farmland are being used without contributing to consumption. Further, the food which is not used needs to be disposed. This may lead to additional environmental problems like methane emissions generated by food decomposition in landfills. The FAO states if food waste was a country, the carbon footprint of it would rank directly after China and the U.S. (FAO,

2013). As a result, food waste conduces to climate change (Hall et al., 2009). Every food item wasted contributes at least as much of an environmental impact as a food item consumed. The only difference is that no value is added through the satisfaction of a human need. Therefore, food waste becomes a social problem as well. The wasted food item could have been of use to serve a persons' need. Given the share of the human population living in hunger or suffering from malnutrition, food waste is highly unethical (Godfray et al., 2010). In addition, it is closely linked to the so-called "double burden". This refers to the problem of, as already mentioned, around 1 billion people suffering from hunger on the one side and about the same amount of people being overweight (Del Giudice et al., 2016). Therefore, this is a problem that needs to be addressed. Subsequently, food waste impacts the current generation by enhancing social inequality through the lack of food for certain parts of the population, while at the same time endangering the environment which is necessary to fulfill nutritional needs for following generations (Aschemann-Witzel et al., 2016). However, food waste does not only have environmental and social consequences but it is also uneconomical (Buzby & Hyman, 2012). The food wasted in Europe alone adds up to a loss of around 57 billion dollars a year (Gustavsson et al., 2011).

To tackle these negative consequences of food waste the European Commission ranks the waste management options in a hierarchy depending on their environmental impact. These strategies include reusing, recycling and the reduction of waste, with the reduction being the most efficient (European Commission, 2012). Due to the specific characteristics of food, food waste can only be managed through reduction. Recycling and reusing represent only a possibility with certain parts of the food production like packaging (Del Giudice et al., 2016). Differing from the EU waste hierarchy, the US Food Recovery Hierarchy from the United States Environmental Protection Agency (USEPA) divides the stage of food prevention into two subcategories. The first is the nutrition of hungry people with surplus food; the second is reducing the source. Even though feeding hungry people is a good strategy, USEPA focuses on reduction, aiming to diminish the amount of food produced (USEPA, 2020). Mourad (2016) added that the only way to reduce food waste is through strong measures aiming at the reduction of unnecessary production and consumption. Recent studies underline this argument by showing evidence how a surplus of food results in higher food waste (Huang et al., 2020; Messner et al., 2021). As a result, one of the possible measures can be the reduction of redundant supply.

2.1.3 Food Waste in the Retail Sector

While research on food waste is broadly diversified, the research on the retail sector of this issue is rather limited (Lebersorger & Schneider, 2014). One reason could be that comparing to the total share of food waste produced by households (53-71%), the impact of retail on food waste is rather small (2-9%). Still, in the EU alone, grocery retail is accountable for circa 4.4 million tons of food waste in 2010, which represents about 5% of the total food waste across the European food supply chain (European Commission, 2011b). According to findings of Priefer et al. (2016) up to 80% of this food waste could have been avoided by the right policy decisions and management interventions. Therefore, food waste is a problem that is located at the end of the supply chain (retail and final consumption) and is linked to the behavior of retailers and consumers (Del Giudice et al., 2016).

Some obstacles in the fight against food waste are purely retail-related. The lack of personnel able to order the right amount of food results in imperfect demand forecasting. Further, the right of retailers to return unsold food to the wholesaler, eliminates any incentive to prevent food waste for the retailer (Eriksson et al., 2017). The missing communication between retailer and supplier is another problem in the ordering process. These are just some of the problems hampering the fight against food waste (Nordic Council of Ministers, 2011).

Other obstacles include the consumer side as well since their behavior is also shaped by marketing tools of grocery stores. Practices like “best-before” dates, excessive cosmetic standards, and pricing strategies like 2 for 1 contribute to consumer-related food waste (Aschemann-Witzel et al., 2016). But retailers can also positively contribute to the issue by encouraging consumers to act in a favorable way (Aschemann-Witzel et al., 2017). Retailers have a strong strategic position concerning the production of food, in-house waste management, and the final consumption. Therefore, the goal to consume less and by that reduce waste should be a goal that is reflected in marketing strategies to promote sustainable consumption. In addition, since the market concentration among retailers in the food retail market is high, the number of relevant players in the market is low. Therefore, these few actors decide which actions to take, resulting in the fact that these decisions have a huge impact on food waste (Kulikovskaja & Aschemann-Witzel, 2017).

Findings of Aschemann-Witzel et al. (2018) show, that the highlighting of altruistic motives through food waste messages increased the likelihood of consumers buying suboptimal food. Del Giudice et al. (2016) point out in their research, that consumers are willing to pay more for products that have a waste reduction certification. The results of Lanfranchi et al. (2014) indicate that by implementing an anti-food-waste campaign consumer choices can be guided and result in more conscious decisions in their buying behavior. This results consequently in social, environmental, and even economic benefits (Lanfranchi et al., 2014).

The monetary disadvantages occur for manufacturers, retailers, consumers, and governments. The wasted resources could be used more effectively. “For us it’s huge. As a single store, the value of food waste is hundreds [of] pounds a week. For Tesco as a company it is a multi-million pounds loss” (Filimonau & Gherbin, 2017, p. 1190). Although one might argue that from a retailer perspective it could be counterproductive to take countermeasures against consumers’ overconsumption due to possible revenue losses, consumers might even appreciate those efforts. Richter and Bokelmann (2018) findings suggest, that consumers view food waste as highly unethical. Therefore, the avoidance of food waste can be seen as an important other-centered motive. Further, the reduction of food waste can be a source of competitive advantage. By increasing operational efficiency, cutting unnecessary costs, increasing the freshness of the offered products, and establishing an environmentally and socially responsible image, retailers can differentiate themselves from the competition (Richter & Bokelmann, 2018).

Even if, like Milton Friedman (as cited in Kulikovskaja & Aschemann-Witzel, 2017, p. 331) argues, the “business of business is business”, which conveys the idea that the main goal of a company is to generate profit and the costs of discarding food are lower than reducing orders, researchers emphasize the importance of social reasonability in business. The present idea of business includes CSR as a good opportunity for improvement. The objective is to accomplish monetary goals while being socially and environmentally responsible. Therefore, ways have to be found to act in a responsible way without damaging the main business.

Gustavsson et al. (2011) argue that one of the main barriers towards the implementation of successful management practices in this field are managerial attitudes. By researching different managerial approaches to reduce food waste, best

practices, which are feasible, could be confirmed and adopted in wider fields (Filimonau & Gherbin, 2017). Research identifying the need of tackling food waste is broad but research examining practical interventions is still insufficient (Muth et al., 2019).

Considering the problem of consumers' expectations of alternatives and fully stocked shelves, retailers are often "forced" to order more than what is necessary. Therefore, the Nordic Council of Ministers (2011) recommends researching the actual behavior of consumers, by investigating consumers' acceptance of fewer alternatives or even empty shelves.

This thesis will focus exactly on the suggested question by researching if consumers feel less dissatisfied facing stockouts if this stockout is justified by the attempt to reduce food waste.

2.2 Out-of-stock

2.2.1 Definition of Out-of-Stock (OOS)

Due to the increasing competition in the grocery store sector, retailers need to achieve a competitive advantage. A significant factor is to meet customer needs through offering the demanded product in the right quality, quantity, and at the moment of the demand (Helm et al., 2013). On the other hand, whilst fighting food waste the reduction of abundant supply may be a possible solution. Here, it can either happen that a retailer orders too much, has to take care of the surplus food and is not able to resell the products paid for. Alternatively, the product might not be available for a customer at the given moment, is, therefore, out-of-stock, and revenue gets lost. Both alternatives bear costs, while the latter brings along societal and environmental advantages.

The definitions of what a stockout is are broad and do not always include the same elements. There are more elaborated definitions like the definition of Roland Berger (2003) which differentiates between three typologies of OOS including classical, dual placement, and delisting stockouts. The classical OOS implicates that the consumer cannot find a desired item on the shelf. In the case of a dual placement OOS, a product can either be found on the promotion placement side or the shelf but not on both. A delisting OOS occurs when the product is no longer available since the store personnel took it.

Holman and Buzek (2008) differentiate between five types of OOS:

- **Empty shelf OOS:** the case in which a consumer is not able to find the product on the shelf
- **Stock present but no help available OOS:** the case in which the item is available but out of reach for the consumer (because it is placed on a high shelf or is locked) and no help is available
- **Stock present, but no access OOS:** the case in which help from a staff member is available, but this person is not able to reach the product either (e.g. employee has no access to the area where the product is stored)
- **Promo price mismatch OOS:** the case in which a customer refrains from buying an item because the price/offer in the store is not the same as advertised
- **Any other reason OOS:** these reasons for consumers to leave the store do not include the above-mentioned reasons or the goal to lower their expenses.

According to Bayle-Tourtoulou et al. (2006), the classical OOS definition focuses mainly on the perspective of sellers and does not consider the economic side of OOS. The authors state that a complete definition should include the duration, the frequency, the importance of the item in the product category, and whether the stockout happens in a period of low vs. high traffic in the store. For the purpose of the present work, the definition of Efficient Consumer Response (ECR) Europe (2003) will be used. ECR Europe (2003, p. 8) defines an Out-of-Stock as: “a product not found in the desired form, flavor or size, not found in a saleable condition, or not shelved in the expected location.” Shortly said an OOS takes place at the moment a customer is not able to buy the desired product. Moorthy et al. (2015) add a very important aspect to that by arguing that a stockout occurs at the moment where the product is not available on the shelf. According to their argument, a customer does not care whether there is a product in the inventory in the backroom or not, if it is unavailable to him or her. Referring to the first three categories of Holman and Buzek (2008), the reasons why a customer cannot find a product may be different, but the result is the same. The consumer will not be able to buy the desired item. These so-called shelf stockouts occur more regularly than store stockouts and are more difficult to measure (Papakiriakopoulos, 2006).

Besides the definition of what an OOS is, the duration of the stockout can differ as well. While a temporary stockout implicates that the desired product is not available at the time the consumer is shopping but will be back in stock at a later point, a permanent stockout implicates that the product will not be available anymore (Sanchez-Ruiz et

al., 2018). The fact that a product is just temporarily unavailable is mostly marked through the remaining labels on the shelf (Verbeke et al., 1998).

2.2.2 OOS Rates

In 1996, Anders Consulting conducted a study for the Coca-Cola Retailing Research Council to identify the OOS rates. After considering ten grocery stores in the U.S., the researchers found an average OOS rate of 8.2% (Andersen Consulting, 1996). In 2002 a study commissioned by “Grocery Manufacturers of America” (GMA) Gruen et al. (2002) observed an average worldwide stockout rate of 8.3%. ECR Europe confirmed these findings in 2003 (ECR Europe, 2003). In March 2020 the American grocery market Costco had a stockout rate of 56% across eight different product categories (Statista, 2020). Although it is to be taken into account that during that period the Covid-19 crisis led to significant supply difficulties.

Geographically spoken, these rates do not significantly differ between regions. Europe has an overall stockout rate of 8.6%, the U.S. comes in at 7.9%, other regions show a rate of 8.2%. The only slightly significant difference that has been detected was between Southeast Europe¹ (10.8%) and Northwest Europe² (7,2%).

Further, the authors point out some peculiarities in out-of-stock rates. Stockout levels depend on categories and vary amongst those. While the worst-performing category reaches rates up to 15-16%, the best category has a rate of around 1%. The top 10% of the Fast-Moving Consumer Goods (FMCG) constitute for 45% of all OOS. However, promoted items are more often out of stock than not promoted items. Ultimately, it is to be mentioned that the later during the day, the higher the OOS rates (Gruen et al., 2002).

Overall, no improvement can be identified over the last years. Gruen et al. (2007) identified that problem specifically and stated: “In fact nearly every report among the hundreds we have read and reviewed that dealt with the retail out-of-stock levels in the FMCG industry continuous to converge on that 8 percent number [...]”(Gruen et al., 2007, p. 7). Hence, the question arises is 8% good or bad? From a customer

¹ Including Portugal, Spain, Greece, Poland, Hungary, Slovakia, Check Republic

² Including Norway, Denmark, Sweden, France, Belgium, Netherlands, Germany, Switzerland, Austria, United Kingdom, and Finland

perspective, every 13th item wanted is out of stock. From a management perspective, OOS costs retailers 4% of their sales (Gruen et al., 2007). This leads up to an estimated loss of 400 billion euros every year for grocery stores (ECR Europe, 2003). This might explain why the focus of studies mainly lays on managerial measures for the reduction of stockouts (Sampaio & Sampaio, 2015).

2.2.3 Consumer responses to OOS

“In retailing, the biggest single customer-service complaint is not having the item. [...] it’s like inviting someone into your house and not offering him a seat” (Faircloth 1998, as cited in Taylor & Fawcett, 2001, p. 74).

When confronted with an OOS situation consumers need to respond and different reactions need to be considered.

Beginning with the Progressive Grocer study (1968) different studies started to develop different decision trees for customer reactions in stockout situations:

The Progressive Grocer study (1968) distinguishes between three possible reactions including:

- 1) substitution within the brand
- 2) substitution with another brand
- 3) refusal to substitute

Walter and Grabner (1975) differentiate between:

- 1) substitution with another brand (higher price)
- 2) substitution with another brand (same price)
- 3) substitution with another brand (lower price)
- 4) substitution within the brand
- 5) store switching

Schary and Cristopher (1979) grouped the customer responses into:

- 1) not buying
- 2) postponement
- 3) substitution with another brand
- 4) substitution within the brand and
- 5) store switching

The most detailed differentiation was developed by Emmelhainz et al. (1991) including 16 response variations.

The listed decision trees are sometimes more and sometimes less specific versions of the SDL model (Substitute, Delay or Leave) of Zinn and Liu (2001). The most commonly used decision tree is that by Schary and Cristopher (1979) and Gruen, Corsten et al. (2002), in which they differentiate between substitution within the brand and substitution with another brand, as well as leaving is divided in switching stores and not buying the item (Aastrup & Kotzab, 2010). Some of these reactions harm the retailer more (store switching), some harm the manufacturer more (substitution with another brand) and some harm both (not buying). Followingly, the question arises of what consumer behavior is most likely to be expected.

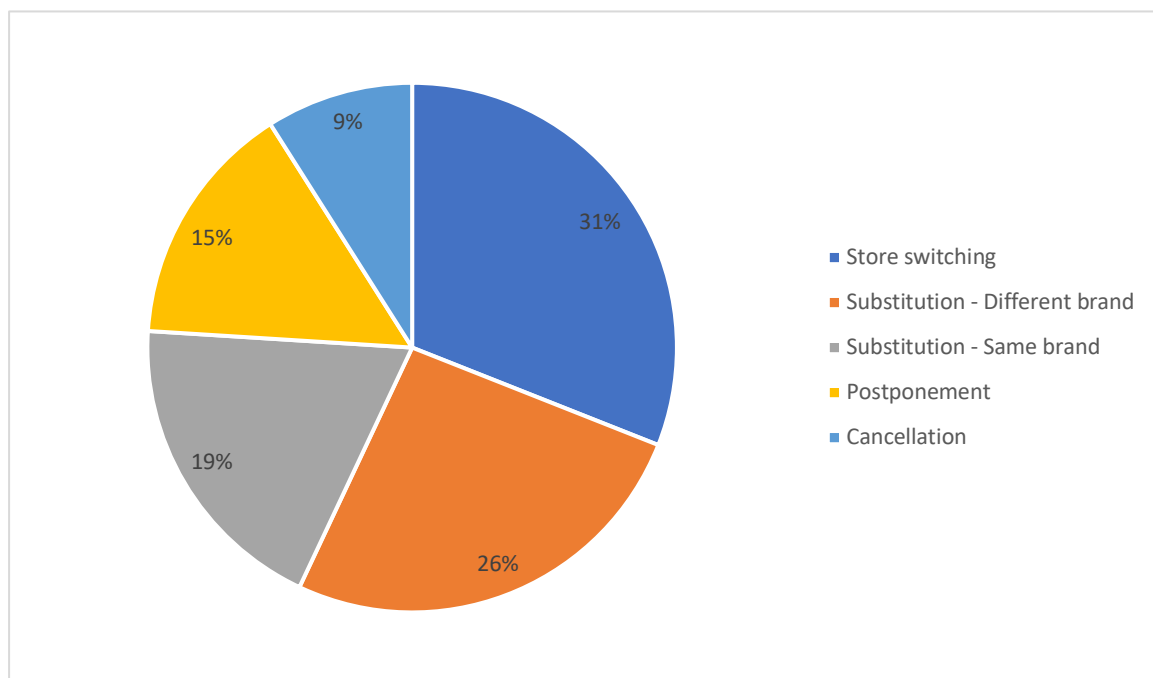


Figure 1: Worldwide consumer responses to OOS (own illustration based on Corsten & Gruen, 2003)

As shown in figure 1, the most frequent reaction worldwide is store switching (31%), followed by substitution with a different brand (26%), substitution with the same brand (19%), postponement (15%), and last cancellation (9%).

The described reactions of customers can vary due to different variables. Verhoef and Sloot (2010) differentiate between brand-related (e.g. brand loyalty), product-related (e.g. product type), store-related (e.g. store loyalty), situation-related (e.g. buying urgency), and consumer related-variables (e.g. age).

Additionally, consumer responses seem to change depending on the frequency a customer faces a stockout.

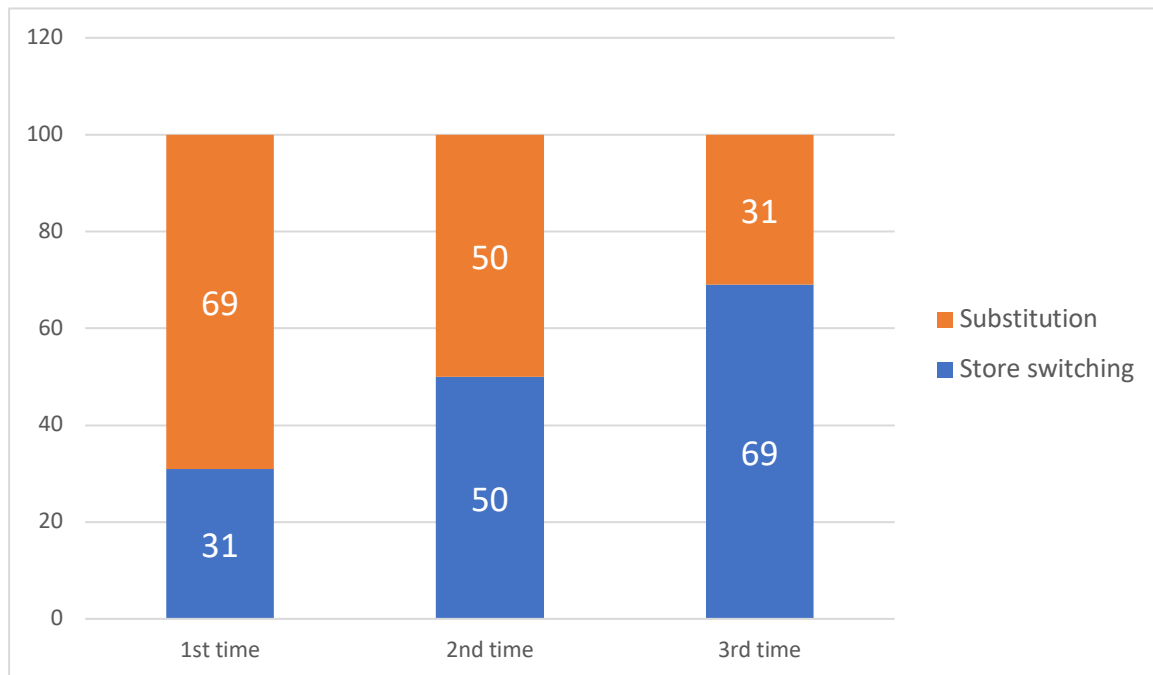


Figure 2: Consumer reactions to stockouts over time [%] (own representation based on ECR Europe, 2003)

Figure 2 shows that shoppers facing an OOS situation for the third time have a likelihood of 70% to switch the store.

According to ECR Europe (2003), grocery shoppers in Europe rank OOS as the third most critical issue after shorter queues and more promotions. Therefore, it is no surprise that OOS situations cause negative emotions for customers. Besides feeling annoyed, frustrated, stressed, getting the sensation of wasting time, energy, and money, consumers feel dissatisfied (Grubor et al., 2017; Sanchez-Ruiz et al., 2018). These emotions can be described by Brehm's theory of psychological reactance (Brehm, 1966). He states, that through the limitation of a person's freedom to behave in a certain way, this person will show a psychological reaction. The goal of this reaction is to regain that freedom of decision. This leads to an increase of aggression towards the origin of the restriction and heightened decision dissatisfaction (Fitzsimons, 2000; Pizzi & Scarpi, 2013).

Damages for retailers can vary. By choosing a cheaper option or store switching the retailer loses revenue as a result of a reduction of sales (Ehrenthal et al., 2014). Moreover, consumers are more likely to cancel the rest of the planned purchase.

Having experienced a stockout in a certain store before, consumers anticipate a higher probability of stockouts in the next purchase. Subsequently, customers had a lower probability of placing further orders, ordered lesser items, spent less money, and had a lower successive conversion rate (Anderson et al., 2006).

Additionally to short-time damages, permanent damages occur as well. Consumers' store loyalty, brand loyalty, store image can be weakened. Further, consumers can build a new relationship with other stores and brands (Wiebach & Diels, 2011). Also, through negative word-of-mouth other consumers can be negatively influenced as well (Zinn & Liu, 2001). The study of Corsten and Gruen (2003) supports these findings by indicating that stores with higher stockouts gain fewer customers from the competition. The final loss is permanent shopper loss to the competition. Although the consumer switching rate is hard to document, Gruen et al. (2007) estimate the costs at 1 million \$ per every 200 customers in the U.S. Campo et al. (2000) conclude that stockouts lead to a loss of customers up to 14 percent.

After identifying the severe consequences stockouts can entail, the question arises on what can dampen these consequences. Sampaio and Sampaio (2015) conducted a study researching the effectiveness of remedies as an alternative to the reduction of stockouts. They highlight the necessity of research in this field by underlining that even though the reduction of stockouts is of high priority, stockout levels have remained constant over the years. Their results show that by offering remedies the percentage of customers leaving the stores can be significantly diminished. Therefore, the research goal of the thesis at hand, examining whether anti-food-waste ambitions can enhance consumer satisfaction in a stockout situation, will provide further insight into this topic.

2.3 Corporate Social Responsibility (CSR)

2.3.1 Evolution and Definition of Corporate Social Responsibility (CSR)

CSR has gained increasing importance over the last decades in the world of scientific research as well as in the business environment. Since CSR is a very complex construct it is often been used interchangeably with terms such as sustainable business, environmental responsibility, corporate citizenship, business ethics, and corporate accountability as well as social and environmental accountability (Jiang & Wong, 2016). The concept of CSR includes several different aspects such as local

well-being, sustainable and environmentally friendly production of products, fair treatment of suppliers and employees, and consideration of the impacts of business on society in general. Carroll (1979) and other authors cite Bowen (1953) with his book *Social Responsibilities of the Businessman* as the study to cover the construct of CSR. As believed by Maignan (2001, p. 58) Bowen's book is "the starting point of an abundant literature on the nature of corporate social responsibilities". Nevertheless, a valid and generally accepted definition of Corporate Social Responsibility is still missing. Dahlsruds (2008) analysis of 37 different definitions of the concept demonstrates the lack of consensus. As stated by Pérez and Rodríguez del Bosque (2012) the growing interest in the concept of CSR has led to deviating definitions in the academic world. Further, the fact that the concept is often researched from different angles and "through different disciplinary and conceptual lenses" (Aguinis & Glavas, 2012, p. 933) adds to the problem of a missing universal definition.

Carrolls (1999) work "Corporate Social Responsibility – Evolution of a Definitional Construct" presents a historical overview of the evolution and different definitions of the construct of CSR. As mentioned above, Carroll (1999) traces the roots of CSR as a construct back to Howard R. Bowen in the 1950s who defines CSR as "[...] the obligations [...] to pursue those policies, to make those decisions, or to follow those lines of actions which are desirable in terms of the objectives and values of our society" (as cited in Carroll, 1999, p. 270).

A decade later, in 1960, Keith Davis argues that even though CSR is a nebulous idea, its power to lead to a long-run gain for firms needs to be taken into account. He argues, that through acting socially responsible firms can achieve a pay-back for their socially responsible decisions (as cited in Carroll, 1999, p. 271). In 1973 Davis defines CSR as "the firm's consideration of, and response to, issues beyond the narrow economic, technical, and legal requirements of the firm" (as cited in Carroll, 1999, p. 277).

In 1979 Carroll introduced in his work "A three-dimensional conceptual model of corporate performance" the most common and influential conceptualization of CSR (Carroll, 1979). He differentiates between four major categories including *economic*, *legal*, *ethical*, and *discretionary/philanthropic* responsibilities. In his later work in 1991, he refers to those as the CSR pyramid (Carroll, 1991). In his work, Carroll states that the first responsibility of a firm is to achieve its economic responsibilities. He declares that "all other business responsibilities are predicated upon the economic responsibility

of the firm, because without it the others become moot considerations” (Carroll, 1991, p. 41). The legal responsibilities imply that a firm has to act within the laws and regulations given by the government or state. The third responsibility (ethical) includes the expectations for a firm that are not codified into law for example avoiding doing harm or the obligation to act fair. The last category (discretionary/philanthropic) includes the expectations of society towards a firm as being a good corporate citizen. These could include contributing resources to the community and improving the general quality of life of the society (Carroll, 1991).

Despite a lack of a generally accepted and universal definition, Corporate Social Responsibility has become an internationally established concept (Schneider, 2015). Another conceptualization, especially suitable for CSR research with a focus on consumer behavior is the SD paradigm (Choi & Ng, 2011). Even though developed for a macro level, this paradigm has been used to explain business behavior (Garriga & Melé, 2004). The Brundtland Committee (United Nations, 1987) characterizes it as development which while meeting the demands of the present still incorporates the needs of future generations and thus does not compromise them. It distinguishes three fields of action for companies: economic growth, social cohesion improvement, and environmental protection and is often referred to as the triple bottom line (TBL). The main statement of the TBL is that organizations or firms should simultaneously aspire to reach social, environmental, and economic goals by integrating all in their ways to conduct business (Slaper & Hall, 2011). The economic dimension refers to the expectation that the company will be profitable. The social dimension implies that the company acts in harmony with its social environment and is involved in social issues for example through aiding social causes. The environmental dimension refers to the environmentally friendly behavior of a company. This includes for example the ideal use of resources or the prevention of waste (Choi & Ng, 2011). This conceptualization is conforming with one of the most frequently used, contemporary, and resultingly fitting for this research, definition from the European Commission. They comprehend CSR as “the responsibility of enterprises for their impacts on society” and define it as: “[...] a process to integrate social, environmental, ethical, human rights and consumer concerns into their [the firm’s] business operations and core strategy in close collaboration with their [the firm’s] stakeholders, with the aim of:

- maximizing the creation of shared value for their owners/shareholders and for their other stakeholders and society at large;

- identifying, preventing and mitigating their possible adverse impacts”
(European Commission, 2011a, p. 6).

This definition goes further than just being socially responsible and mere compliance with legal regulations on a voluntary basis. It expects firms to go beyond that and contribute to societal well-being. A lot of core features from the previous definitions of the European Commission in 2001 and 2002 such as the stakeholder approach³ or the fact that CSR exceeds just the mere compliance with legal regulations have been adopted. Nevertheless, there are also differences between the two versions. Firstly, the absence of the triple bottom line, which was compensated through the section of human rights and ethics. Secondly, the aspect of voluntariness, which was a dominant factor in the definitions of 2001 and 2002 has been strongly relativized suggesting that Corporate Social Responsibility is no longer nice to have but is rather a basic expectation towards modern firms (Schneider, 2015).

Finally, it needs to be clarified that according to the differentiation of Brown and Dacin (1997) one has to distinguish between corporate associations and product associations. The first includes “all the information about a company that a person holds” (Brown & Dacin, 1997, p. 69) and therefore concentrates on the firm at large, whereas the second focuses on specific products. In this thesis, the corporate associations are of interest, as the respondents are asked about their overall CSR perception of the firm.

2.3.2 Consumer responses to CSR

One of the most fundamental findings in the literature is that stakeholders in general reward firms that implement CSR activities in their business (Dawkins & Lewis, 2003). Engaging in socially responsible activities does not only increase the well-being of society and the planet in general but can also form a generally favorable image of the company (Loureiro et al., 2012). A 2006 conducted study by McKinsey & Company states that firms engage in CSR mostly because the management expects to obtain positive and company favoring reactions from shareholders (McKinsey&Company,

³ The stakeholder approach implies that a firm has not only to consider the interests of the shareholders but should also consider the interests of the stakeholders (e.g. customers, suppliers, employees, or local communities).

2006). Aschemann-Witzel et al. (2016) conclude that firms seem to rather enlarge their possibilities than limit them. Therefore, CSR can be regarded as strategically important for firms (Loureiro et al., 2012).

Research indicates that socially responsible actions of firms are taken into consideration by consumers when purchasing a product (Bhattacharya & Sen, 2003). Some findings indicate that even though CSR increases consumers' purchase intention, it does not necessarily increase purchase behavior (Bhattacharya & Sen, 2004; Luo & Bhattacharya, 2006). Ailawadi et al. (2014, p. 157) explain these findings with "consumers' unwillingness to trade off other attributes for CSR." Other findings though (e.g. Andrews et al., 2014; Du et al., 2011; Henderson & Arora, 2010; Krishna & Rajan, 2009) indicate that consumers choose products they apprehend as socially responsible in both field and experimental settings. According to findings from the consulting group Brands&Values, 40% of the surveyed consumers in Germany would prefer to buy a product from a company that participates in CSR activities than from a company that does not (M. Blumberg & Dröge, 2008). Research shows, that consumers are even willing to pay a price premium for products of firms they perceive as socially responsible (Trudel & Cotte, 2009). Furthermore, Pérez et al. (2013) ascertained that CSR does also positively influences consumer loyalty, often measured through repurchase rates.

Socially responsible initiatives of companies do also have a positive impact on trust towards a firm (Fatma et al., 2016) and consumer satisfaction (Chung et al., 2015a; Luo & Bhattacharya, 2006; Park et al., 2017). Carroll (1991) and Achrol and Kotler (2012) trace this back to the idea that CSR works as an indication of shared social norms between the firm and its customers. Carvalho et al. (2010) add that switching and complaining rates decrease.

Additionally, CSR can positively affect the reputation of a company (Godfrey et al., 2009). Consumers also tend to be more willing to recommend or promote a company and its products (Carvalho et al., 2010; Li et al., 2017) as well as engage in positive word-of-mouth (Du et al., 2011). Not only does CSR enhance positive word-of-mouth, but it also reduces anger and negative word-of-mouth after dissatisfactory incidents and increases consumers' resilience to negative information (Joireman et al., 2015; J. Kim & Park, 2020).

These positive attitudinal and behavioral responses also affect measurable business outcomes. CSR initiatives of firms are regarded as an important feature for the differentiation of companies. Therefore, CSR can lead to a competitive advantage for firms. Especially if firms engage in proactive CSR approaches, which go beyond the standards dictated by law. This engagement offers firms the opportunity to be a first mover and set standards before the competition does (Y. Kim, 2017). Often these companies also benefit from the fact that these self-imposed regulations later become law (Aschemann-Witzel et al., 2016). These competitive advantages often result in higher profits (Carroll, 1999).

In conclusion, it is interesting to see that all these positive reactions seem to be even stronger if a company engages in CSR activities that are considered appropriate and have personal relevance for the consumer. A high cause fit between the firm and the field of engagement in CSR has been shown to be more effective (Du et al., 2007). A good example is the US supermarket Whole Foods who created a campaign including all business-relevant aspects like sustainable procurement to environmentally conscious retailing. This initiative has led to firms' massive success and helps the company to retain customers (Springer, 2006).

2.3.3 CSR related to food waste

The concept of Corporate Social Responsibility can include different and multiple aspects. Therefore, it is necessary to identify the relevant component of the term for this study. Anti-food-waste ambitions are a relevant and rising part of CSR in this field of study and are studied from different angles. Further, several associations like the Food Waste Reduction Alliance, the Retailers Environmental Action Program (REAP) in Europe, or the Waste and Resource Action Program in the UK have defined fighting against food waste as one of their primary goals (Bacos et al., 2014). Priefer et al. (2016) approach the problem of food waste by presenting promising policy options of the EU to prevent food waste. Del Giudice et al. (2016) researched the impact of anti-food-waste labeling on consumers' willingness to pay a price premium. Their findings show, that especially labeling indicating the reduction of the carbon footprint enhances participants' willingness to pay.

Forsman-Hugg et al. (2013) classified seven key dimensions of CSR for the food chain: product safety, environment, animal welfare, corporate nutritional responsibility, local market presence, and economic responsibility as well as occupational welfare. The

reduction of food waste is to be allocated to the aspect of environmental CSR. Anselmsson and Johansson (2007) researched the possible dimensions of CSR positioning for grocery retailers. Their findings indicate, that grocery retailers can focus on the dimension of human responsibility, product responsibility, and environmental responsibility, with food waste being part of the environmental dimension.

A retailer in the food sector can implement different strategies to reduce food waste. From the donation of surplus food to charity, to implementing waste targets, and up to the relaxation of cosmetic standards of food (Devin & Richards, 2018). The reduction of inappropriate packaging sizes (e.g. oversized) as well as the refraining from advertising increased food purchase with offers like 'buy one get two' are other possibilities to avoid food waste. Further, Tesco Plc for example has announced to remove the best before date on their products to prevent that customers discard still edible products (Pulker et al., 2018).

The strategy of the reduction of supply is rather under-researched, due to the assumption that consumers feel restricted if the choice of products is restricted (Gruber et al., 2016a). This strategy requires an exact forecast of the demand (Bacos et al., 2014). In the case of a wrong forecast, two situations may arise. The first option is that the forecasted demand has not occurred. In this case, the supermarket has a surplus of food that needs to be taken care of. The second option is that there has been more demand than forecasted and the supermarket is out of the requested product. This will lead to an out-of-stock (OOS) situation, where the customer is not able to get his or her desired product. Even though the second possibility prevents food waste, it can lead to customer dissatisfaction. According to research, the lack of the desired product on the shelves can lead to different negative emotions like dissatisfaction, irritation, and frustration (Sanchez-Ruiz et al., 2018). However, not only customers are negatively affected by OOS situations. Retailers take the risk of upsetting loyal customers, losing customers who cannot find the desired product for a shopping trip, and even worse losing them entirely to a competitor.

Corporations often face the problem of how to ensure both social and environmental demands on the one side and stakeholder interests in profit maximization on the other side (Hahn et al., 2017; Mohr & Webb, 2005). But what if the negative outcomes of OOS situations can be "buffered" through CSR-related anti-food-waste ambitions? Since an initiative to reduce food waste needs the engagement, acceptance and

involvement of consumers, it is interesting to examine consumers' reaction to a reduced supply due to anti-food-waste ambitions.

This study will concentrate on the manipulation of the CSR dimension through the usage of two different scenarios (one implicating the ambitions to reduce food waste resulting in a stockout and one without explanation resulting in a stockout) and the expected differences in consumer satisfaction.

2.4 Theory

2.4.1 Perceived Value Theory

In the academic world, there is still the debate whether to manage companies relying on the stakeholder or the shareholder theory. The stakeholder theory suggests that a company has not only a responsibility towards its owners and shareholders but also towards employees, customers, suppliers, the environment, and society at large. Followingly, according to this view CSR activities are essential. The shareholder theory on the other hand suggests that a firm has its first and most important responsibility to the owners and shareholders and therefore views CSR initiatives as rather optional. These initiatives can bear risks and costs for the company, explaining why managers are sometimes hesitant to encourage them (Choi & Ng, 2011). In the case of this thesis, one might argue that diminishing the supply, which leads to a possible stockout, bears a certain risk for the firm. The theory of perceived value will be used as the basis to argue, how the CSR-related initiative to reduce supply, adds value to the company from the customers' point of view.

Perceived value (PV) from a customer's perspective is vital to explain a firm's success over time. Companies that provide a specific value to customers are more likely to be market leaders (Mizik & Jacobson, 2003). By offering better value, the firm can gain a competitive advantage and even create value for itself (Holbrook, 2019). Slater (1997, p. 166) states that "[...] the creation of customer value must be the reason for the firm's existence and certainly for its success." Although the concept of PV gained increasing attention, a uniform definition is still missing (Jozée Lapierre, 2000; Zeithaml, 1988). A reason for that could be the various conceptualizations as customer utility, psychological price, worth and quality or perceived benefits relative to costs (Woodruff, 1997). Moreover, the perception of value is influenced by the type of product or service as well as customer characteristics (Zeithaml, 1988).

The most commonly accepted definition of PV is the one proposed by Zeithaml (1988). The author defines PV as “The consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given” (Zeithaml, 1988, p. 14). The receiving part of the concept describes the benefits of a consumer from utilizing a service or a product. The giving part of the construct describes the sacrifices of a consumer to obtain it. This includes not only monetary aspects but also aspects like energy or time consumption and experienced stress (Yang & Peterson, 2004).

Concerning the dimensions of perceived value, two main approaches must be differentiated. Firstly, PV is described as a unidimensional construct. Even though it may be produced by multiple antecedents, it is not a combination of several items. Research according to this view focuses on the tradeoff of utility from the product and service and the disutility mostly measured through price (Sánchez-Fernández & Iñiesta-Bonillo, 2007). Even though this view has been broadly adopted, it has been criticized to be too superficial (Fernández et al., 2008).

The second approach defines the concept as multidimensional. This approach consists of multiple dimensions that allow a holistic illustration of PV (Sheth et al., 1991; Sweeney & Soutar, 2001). Bolton and Drew (1991) indicate that PV is more than just the simple one-dimensional tradeoff between utility and sacrifice/price since it is more complex. Woodruff (1997) defines the concept as a preference for the performance, the product attributes, and the consequences that fulfill the customer’s aims and purposes. Staudt et al. (2014, p. 67) include in their definition the aspect of differentiation and define perceived value as “the unique offer made to a company’s customers, with all its hard and soft dimensions, and therefore as the cynosure of how a company seeks to differentiate itself from competitors.”

Even though there is no universal definition, research has found a certain point of agreement regarding the main point of the construct:

- the use of a specific product, brand, or service is necessary to evaluate consumers PV
- a firm cannot objectively create PV since it is a subjective perception
- as mentioned above, PV results from a tradeoff including different dimensions
- PV is dynamic and can change over time
- it must be considered relative as it is often compared to the PV of the competition (Currás-Pérez et al., 2018).

Perceived value however does not only include functional/utilitarian aspects. Social, epistemic, or emotional aspects need to be taken into account as well (Sheth et al., 1991). In their research Sweeney and Soutar (2001) developed the 19-item PERVAL scale to measure four different dimensions of PV:

- quality as a **functional value** referring to the utility obtained from the expected performance and the perceived quality of a product/service
- price as a **functional value** referring to the utility obtained from product/service by reducing its perceived short and long-term costs
- **emotional value** referring to the utility obtained from positive feelings/affective states due to the product/service and
- **social value** referring to the utility obtained from the ability of the product/service to increase social-self-concept (Sweeney & Soutar, 2001).

Another model that includes multiple dimensions is the value model suggested by Holbrook (2006). According to the author, value must be looked at “as an interactive relativistic preference experience” (Holbrook, 2019, p. 13). The aspect of interaction is that value can only be created through a cooperation of the company and a stakeholder. Since people judge the actions of a firm as either good or bad, favorable or unfavorable or positive or negative, value depends on preference. The relativistic dimension of the definition is based on the fact that value depends on the individuals each evaluating value differently. Table 1 presents the four different types of value.

Table 1: Holbrook's value model (own representation based on Pelozo & Shang, 2011)

	Extrinsic	Intrinsic
Self-oriented	1.Efficiency/Excellence	3.Play/Aesthetics
Other-oriented	2.Status/Esteem	4.Ethics/Spirituality

In table 1 the horizontal axis differentiates between extrinsic and intrinsic value. Extrinsic value refers to the case in which a product or a service is a means to an end. Intrinsic value refers to the case where the product or the service is valued for their own sake. The vertical axis differentiates between self-oriented and other-oriented value. In the first case, the value depends only on the person consuming or experiencing the product or the service. In the second case, the value depends on how other people are affected by the consumption or experience of a product or service.

The first quadrant of table 1 includes value through efficiency (e.g. convenience) and excellence (e.g. quality). The second quadrant includes the value of status and esteem. In both cases value depends on the perception of others. The third quadrant includes the value of play and aesthetics referring to the joy or the appreciation of a product or a service. The last quadrant includes the value of ethics and spirituality referring to the intrinsic desire to do good or feeling connected to a greater power through a product or service. In the next chapter, this model will be adapted to the concept of CSR, more specifically to anti-food-waste ambitions.

2.4.2 CSR and Perceived Value

The question arising is how CSR initiatives can provide value for customers. Clarkson (1995) states that these activities are a way for firms to establish a relationship with customers, especially since the consumption behavior of customers more and more includes social and environmental standards. These criteria are taken into account for the decision with which company to strengthen their relationships for customers (Currás-Pérez et al., 2018). Further, CSR initiatives help companies to move to the forefront the advantages of a product or service rather than the disadvantages (Hansen et al., 2008). Therefore, the higher the perceived CSR engagement, the higher the consumer perceives the value.

Research has shown that CSR influences the perceived value of customers. The research of Mohammed and Al-Swidi (2019) concludes that CSR activities are a notable predictor of customer perceived value. Staudt et al. (2014) show that a high effort on CSR leads to higher perceived value from the customers. Furthermore, the higher the effort is perceived by the customers the bigger the effect. Choi and Ng (2011) argue that since value includes everything a customer obtains in relation to a customer's sacrifices to acquire a product or service, sustainability should be of value. According to the approach of Murry and Vogel (1997), companies should try to generate a value that affects different stakeholders through social or public benefits. In return, stakeholders will be more willing to support the company. Boccia and Sarnacchiaro (2018) add that through CSR companies can add value not only for customers purposefully pursuing this goal but for stakeholders in general. Green and Pelozo (2011) differentiate between three dimensions (utilitarian, emotional, and social) through which CSR can generate value for customers. A CSR initiative can generate these simultaneously but not necessarily in the same direction. As an

example, CSR could have a positive effect on the social and emotional dimension but reduce the perceived utility for a customer.

CSR has also a strong link to emotional value. The feeling of doing something beneficial for the society or the environment gives consumers a positive feeling about themselves and the action and is fun (Bhattacharya & Sen, 2003). Secondly, CSR can generate social value for consumers. It gives consumers a way to express their values and their worldview, define themselves, and socially express their personality (Sen & Bhattacharya, 2001). This value is mainly affected through activities such as donations or environmental protection (Green & Peloza, 2011). This thesis will focus on emotional and societal value, as the CSR initiative to reduce supply to diminish food waste does probably not enhance the perceived utility for customers.

Peloza and Shang (2011) explain the added value of CSR for consumers in more detail. According to the authors, the purchase from a socially responsible company produces different benefits for customers (extrinsic or intrinsic and self-oriented or other-oriented). As mentioned in chapter 2.4.1 Peloza and Shang (2011) adopted the model of Holbrook (2006) for their research purpose. To give the reader a better understanding of how the CSR-related initiative of anti-food-waste ambitions can create value to the consumer according to Holbrook's value model, the same approach will be followed.

Table 2: Adaptation of Holbrook's value model to anti-food-waste ambitions

	Extrinsic	Intrinsic
Self-oriented	1. Efficiency/Excellence No obvious value from anti-food-waste ambitions	3. Play/Aesthetics One can appreciate the simplicity of anti-food-waste ambitions
Other-oriented	2. Status/Esteem Anti-food-waste ambitions represent to others one's concern for the	4. Ethics/Spirituality Anti-food-waste ambitions are a way of contributing to environmental conservation and fair

environment and the society	distribution of food resources
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Table 2 shows how the effort of a company to reduce food-waste can generate value to customers. The first quadrant, referring to extrinsic and self-oriented value through efficiency or excellence, is not relevant for this research as the reduction of supply does not create efficiency or excellence for the customer. The second quadrant, referring to extrinsic other-oriented value through status or esteem, implicates that through supporting the company's efforts, customers can show others their concern for the environment and the society. The third quadrant, referring to intrinsic self-oriented value through play and aesthetics, implicates that customers can enjoy the simplicity of just being able to buy what is in stock and therefore reducing the overload of choice. This value is certainly depending on the personality traits and preferences of customers. The last quadrant, referring to intrinsic other-oriented values through ethics or spirituality, implicates that customers can derive value from the feeling of acting in a responsible way towards the environment and the society.

The next chapter will focus on perceived value and its influence on consumer satisfaction.

2.4.3 Perceived Value and Consumer Satisfaction

To illustrate how perceived value can influence customer satisfaction it is crucial to understand that perceived value is considered to be a noteworthy predictor of satisfaction (Day & Crask, 2000; C.-K. Lee et al., 2007; Oliver, 1996; Sweeney & Soutar, 2001; Woodruff, 1997). For example, Lapierre et al. (1999) identified a positive effect of perceived value on consumer satisfaction. Aulia et al. (2016) argue that through applying the theory of perceived value, it is possible to enhance consumer satisfaction. Consequently, the higher the perceived value for a customer, the higher the satisfaction. Sen and Bhattacharya (2001) add that CSR does not only add value to a product or service but through the identification, implementation, and communication of CSR activities, customers enhance their specific knowledge which results in higher customer satisfaction.

As mentioned in chapter 2.4.1 there are different dimensions of value. Fitting to the research question, Lee et al. (2007) identify that emotional value has a strong and

direct effect on consumer satisfaction. Therefore, positive feelings from the consumption of a product or a service enhance the feeling of satisfaction for consumers. Further, it could be established that social value, referring to the ability to demonstrate one's self-image, increase one's social self-concept and gain social approval, heightens consumer satisfaction (Williams & Soutar, 2009). Slack et al. (2020) researched the impact of perceived value on the satisfaction of supermarket customers in developing countries. Their findings reveal that customers perceived value has a significant positive effect on customer satisfaction. Furthermore, they identify that "shopping at supermarkets is perceived to be an essential factor that affects customer's decision-making, social image, and social status and for customers to improve how they are perceived by others" (Slack et al., 2020, p. 1249). This underlines the findings of Williams and Soutar (2009) on the effect of social value on customer satisfaction. Finally, one has to bear in mind, that perceived value is the outcome of different elements that include positive (e.g. enhanced social status) as well as negative (e.g. less variety) utilities for customers. Thus, positive elements enhance customer satisfaction, while negative elements diminish customer satisfaction (Gounaris et al., 2007). Therefore, the present study aims to investigate if CSR-related anti-food-waste efforts have the ability to dampen consumer dissatisfaction in a stockout situation. This expected influence is based on the argument that CSR activities, like anti-food-waste ambitions, add value to the service of a retailer and therefor have a positive influence on consumer satisfaction.

3 Conceptual Model and Elaboration of Hypothesis

3.1 The Main Effect

3.1.1 CSR Justification

In the underlying conceptual framework, the CSR justification is the independent variable in the model. Through the application of the scenario technique this independent variable will be manipulated. Further, it is expected that the independent variable has a direct effect on the dependent variable, in this case, consumer satisfaction.

Research has shown that how the message of a stockout situation is delivered to customers affects their satisfaction (Tsiros et al., 2004). Previous studies differentiate between external or internal ascription of responsibility. The explanation of a stockout can either be company-related (e.g. by taking the blame for the shortage) or not company-related (e.g. by explaining the shortage through high demand). Boshoff and Leong (1998) show in their research, that a company related explanation has a positive influence and heightens the potential to restore satisfaction after a failure. An explanation for this could be that the customers get the feeling that the company seems to be in control of the situation. The findings of Pizzi and Scarpi (2013) support this assumption. According to their data, consumers evaluate the whole experience more positively. Therefore, the authors suggest that retailers should assume responsibility even for stockouts they are not responsible for.

Anderson et al. (2006) investigated the effect of five different firm responses to stockouts in a direct marketing environment. They evaluated the following five possible responses:

- 1) simple information that the product is out of stock
- 2) an explanation informing the customer that there are problems with the supplier
- 3) an explanation informing the customer that the product is out of stock due to its popularity
- 4) the offer of a \$5 discount if the customer decides to backorder
- 5) the offer of 10% discount if the customer decides to backorder.

Their findings show that the most effective response was the explanation of the stockout due to the product's popularity. Sampaio and Sampaio (2015) took a similar

approach to investigate the effectiveness of remedies in case of a stockout. They investigated the effect of:

- 1) an apology
- 2) a raincheck
- 3) a home delivery
- 4) a trade-up and
- 5) a discount.

Their results show that all remedies are effective, but apology turned out to be counterproductive since it increased the percentage of consumers leaving the store (Sampaio & Sampaio, 2015).

Research, as conducted by Klein and Dawar (2004), determined that CSR engagement before a product-harm crisis weakens the blaming of the company through consumers. Since consumers experience gratitude for a company's effort to act responsibly towards society as a whole, CSR activities of a company influence the reaction of consumers in case of an unpleasant situation through gratitude. This is the case, even if they do not benefit from this directly. Kim and Park (2020) support these findings with their research, showing that CSR has a buffering effect in times of product failures.

Based on these findings, the present study will examine whether the engagement to reduce food waste as a CSR-related initiative will have a buffering effect on consumer satisfaction in case of a stockout.

3.1.2 Consumer Satisfaction

Oliver (1980), Fornell et al. (1996), and Grubor et al. (2017) define consumer satisfaction as the overall experience of purchasing and consumption of products and services over time from a consumer's perspective. Luo and Bhattacharya (2006, p. 3) define consumer satisfaction in a broader way as: "[...] the overall evaluation based on the customer's total purchase and consumption experience with a good or service over time". Walsh and Bartikowski (2013), as well as Kim et al. (2009), include the aspect of comparison in their definitions. According to these authors, satisfaction is to be defined as the result of comparing the customers' expectations of a product or service to what a customer actually obtains. As claimed by the expectation disconfirmation theory, satisfaction is generated when the expectations are met or exceeded.

Conversely, if those expectations are not met consumers feel dissatisfied (Fatma et al., 2016). El-Gharaihy (2014) stresses the emotional answer of consumers to the received pleasure through consumption. To ensure a company's success and growth, consumer satisfaction is vital (Irshad et al., 2017).

Consumer satisfaction can either be approached in terms of issue-specific satisfaction or general satisfaction (Rivera et al., 2016). This study will focus on the satisfaction of consumers with the situation after experiencing the stockout.

3.1.3 The Effect of CSR Justification on Consumer Satisfaction in Stockout Situations

Smith (1996) makes the theoretical assumption that people who act in a socially responsible way concerning CSR can draw a feeling of personal satisfaction from doing good. Further, CSR initiatives generate a positive image of a company, leading to a more positive overall evaluation of this company (Loureiro et al., 2012). Research on the effect of CSR activities on customer satisfaction is broad. In his study Strahilevitz (1999) identifies four reasons for which consumers are willing to pay higher prices or accept inconveniences while shopping for products, like the pursuit of feeling morally satisfied, experiencing a "warm glow", the desire to "do the right thing" and the wish to perceive themselves as good. Shin and Thai (2015, p. 388) explain the positive effect of CSR on consumer satisfaction through "[...] the fact that CSR is considered to indicate a social norms between a company and customers." Luo and Bhattacharya (2006) identify a direct and positive effect of CSR initiatives of a firm on customer satisfaction. This proves that customer satisfaction can be improved through CSR initiatives. Rivera et al. (2016) show in their findings that environmental-related CSR efforts have a positive effect on consumer satisfaction.

As mentioned already, one of the ways to enhance consumer satisfaction is through adding value to a product or service. In the American Customer Satisfaction Index Model from 1996, Fornell et al. (1996) already proposed that perceived value positively influences consumer satisfaction. Research shows, that CSR initiatives are capable of enhancing this value and therefore heightening consumer satisfaction. All else staying equal, Luo and Bhattacharya (2006) expect customers to derive a higher perceived value from products being produced and distributed by a socially responsible company than from a socially irresponsible company, resulting in higher consumer satisfaction. Pérez et al. (2013, p. 222) agree and illustrate that: "customers are likely to derive a

better perceived value and higher satisfaction from a product when it is offered by a socially responsible firm.” El-Garaihy et al. (2014) provide three explanations for why CSR enhances consumer satisfaction whereby perceived value is one of those. Strahilevitz (1999) uses the example of charity donation and concludes that through the donation value is added to the product and customers feel good about themselves. A study conducted by Lee et al. (2011) verified the impact of emotional value on consumer satisfaction.

According to Klein and Dawar (2004), one of the beneficial aspects of CSR is that it can help to protect a company’s reputation after negative experiences. Fatma et al. (2016) researched the impact of CSR on consumer reactions after a service failure and concluded that a socially responsible image can help restore satisfaction after such an incident. These findings support the previous study of Bolton and Mattila (2014) that found a mitigating effect of consumer satisfaction in service failure situations.

The study of Kim and Lee (2015) focuses on the buffering and boomerang effects of CSR on consumer perceptions during a crisis. Their findings reveal that a good reputation of a firm, due to previous CSR initiatives, can help to protect a firm from negative consumer perception in a crisis. While investigating the effect of CSR on post-recovery satisfaction in the hospitality sector, Siu et al. (2014) confirmed a buffering effect of CSR on consumer satisfaction when failures occur. Finally, Alhouti et al. (2021) confirmed the beneficial aspect of CSR on consumer satisfaction especially if consumers have a strong need to feel connected to others, measured through relatedness. Further, they explain the halo effect of CSR, referring to the above mentioned “warm glow” produced by CSR, with the increased perception of warmth of a company engaging in CSR (Alhouti et al., 2021).

Since previous research shows that CSR initiatives have a positive effect on consumer satisfaction and can even dampen the effects of negative experience, the first hypothesis in this study implies that:

H1: CSR as a justification for a stockout situation has a positive effect on consumer satisfaction.

3.2 The Moderation

The term moderator refers to any third variable affecting the direction and/or the strengths of a relationship between the independent variable (in our case CSR justification) and the dependent variable (in our case consumer satisfaction). Frazier et al. (2004, p. 116) refer to this effect as an “interaction whereby the effect of one variable depends on the level of another.” These moderators display under which condition this relation (in our case the influence of CSR justification on consumer satisfaction) is stronger for particular individuals than for others (Baron & Kenny, 1986; Frazier et al., 2004).

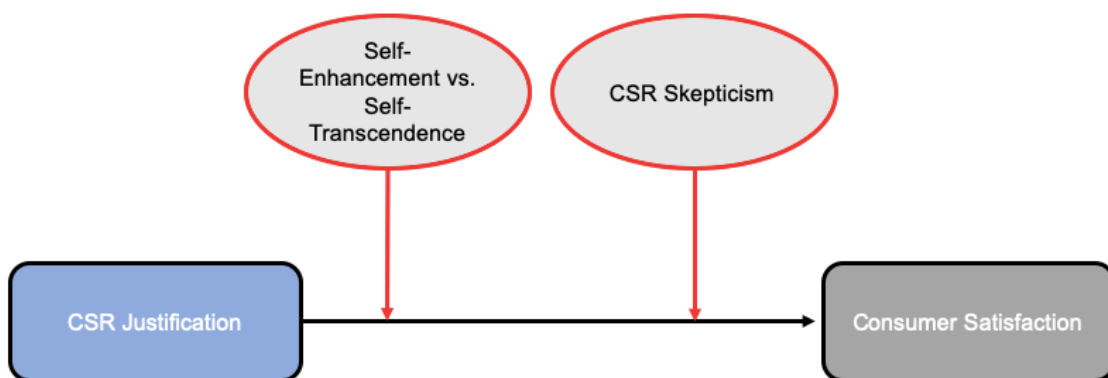


Figure 3: Direct effect and moderation model

In the conceptual framework of this thesis, moderators affect the direct effect of CSR justification on consumer satisfaction.

3.2.1 Human values (Self-Enhancement vs. Self-Transcendence)

The concept of values is although its complexity a widely used concept in many fields. By researching consumer behavior or consumer responses, the concept of human values has been investigated to understand how values influence consumers in the marketplace. One of the most common frameworks evaluating personal values is Schwartz’s value theory (Schwartz, 1992, 1994, 2003). Schwartz defines values as: “[...] affect laden beliefs that refer to a person’s desirable goals and guide the selection or evaluation of actions, policies, people and events” (Schwartz, 2003, p. 297). Schwartz’s classification of values includes ten basic values: Self-direction, Stimulation, Hedonism, Achievement, Power, Safety, Conformity, Tradition, Benevolence, and Universalism. Further, these values stand in a relation to each other.

The pursuit of one value (e.g. power) can either be in congruence with another value (e.g. achievement) or in conflict (e.g. benevolence). Figure 4 constitutes the relations amongst the values. The circular presentation expresses a motivational continuum. Therefore, the closer two values are, the more alike are the motivations behind these values. The further away two values are, the more conflicting are the motivations behind the values. Following, two bipolar dimensions can be identified, including conflicting values: conservation vs. openness to change and self-enhancement vs. self-transcendence (Schwartz, 2003). The present study will focus on the last dimension.

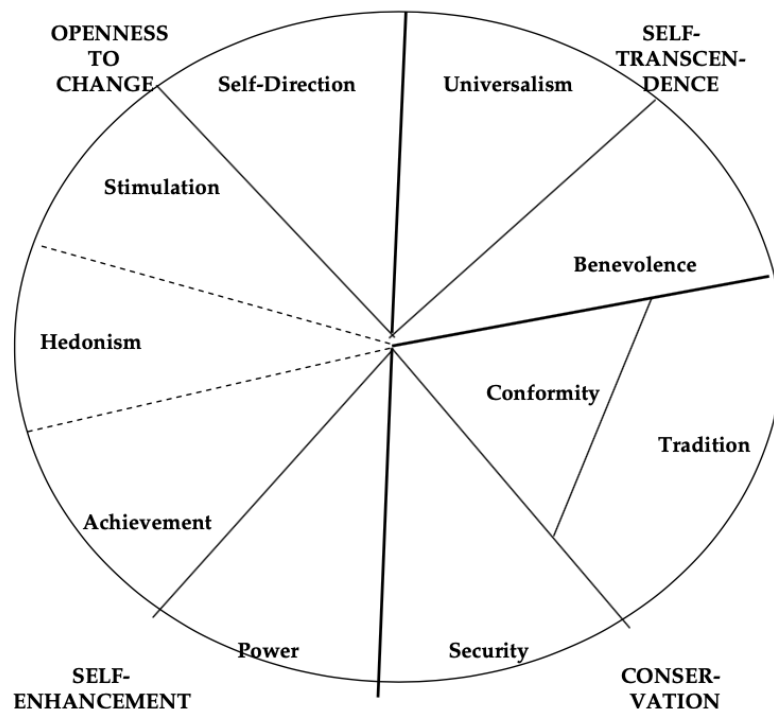


Figure 4: Theoretical model of relations among ten motivational types of values (Schwartz, 2003)

Self-enhancement implies that a person prioritizes him or herself and has a self-oriented view of the world. Schwartz defines it as: “the pursuit of one’s relative success and dominance over others” (Schwartz, 1994, p. 25). The value of achievement (including the appreciation of one’s personal success, the demonstration of competence, and living up to social standards) and power (including the appreciation of prestige/social status and the control or command over people and resources) represent the dimension of self-enhancement (Bridoux et al., 2016). These values are

commonly connected with a great focus on personal well-being and superiority over others (Schwartz, 1992). Opposed to this dimension, self-transcendence implies a perception that is other-oriented. Schwarz expresses it as "acceptance of others as equals and concern for their welfare" (Schwartz, 1994, p. 25). It includes the values of benevolence (containing the care for the welfare of people a person is close to) and universalism (containing the care for the welfare of the general society and nature) (Bridoux et al., 2016). These values are commonly connected with the desire to make the world a better place (Schwartz, 1992). When making a choice or showing an intention or attitude, the conflict between the two dimensions can arise. A person can score high in both dimensions but confronted with the necessity to make a choice, a person will choose the value dimension which he or she considers most important or endorses the most (Schwartz, 1992; Steenhaut & van Kenhove, 2006). Generally, it can be said that individuals all share the same values but differ on the prioritization (Alniacik et al., 2020).

The framework of Schwartz has been commonly used in different countries and disciplines (e.g. psychology (Wilson, 2005), international management (Egri & Ralston, 2004), and marketing (Steenkamp et al., 1999) and indicates a high predictive validity (González-Rodríguez et al., 2019). Since values guide how a person makes his or her decision Hunt and Vitell (1986) assume that in ethical decision making the value systems of an individual are of crucial importance. Previous research found that values influence the perception and evaluation of CSR initiatives. Ecological beliefs and the values of self-enhancement and self-transcendence seem to be linked (Stern, 2000). Romani et al. (2013) researched the influence of altruistic values on consumer reactions to CSR, identifying that these values (including benevolence and universalism) lead to a higher appreciation of CSR activities from a consumer perspective. Research on life goals predicting environmental behavior, conducted by Unanue et al. (2016), shows that people focusing on intrinsic life goals (linked to values like universalism and benevolence) engaged more often in pro-environmental activities. People with extrinsic life goals (linked to self-enhancement values) had a smaller probability of taking part in pro-environmental activities. The study of Lerro et al. (2018) comes to the conclusion that self-enhancement on the other side diminishes the willingness to pay in a CSR context. González-Rodríguez et al. (2019) reveal that self-transcendence has a positive effect on customer perception of environmental and social practices applied by companies. Self-enhancement on the other side had no

significant effect on how customers perceive these practices. In their research on moral motivations and their influence on CSR Golob et al. (2019) found supporting evidence underlining the importance of values related to altruism in the CSR context. Again, a negative impact of self-enhancement could not be verified. Furman et al. (2020) show that consumers who are more open towards CSR tend to evaluate self-transcendence higher, while those less open evaluate social status as more important. Other studies, like Ladhari and Tchetgna (2015) or Zasuwa (2016), identify a negative effect of self-enhancement on the perception of CSR.

Previous studies showed that since food-waste is associated with highly unethical behavior anti-food-waste ambitions can appeal to altruistic motives, including self-transcendence (Aschemann-Witzel et al., 2019; Richter & Bokelmann, 2018).

Based on previous research, showing the positive effect of self-transcendence and the negative effect of self-enhancement on CSR, we hypothesize that:

H2a: Self-Transcendence positively moderates the effect of CSR justification on consumer satisfaction in a stockout situation.

H2b: Self- Enhancement negatively moderates the effect of CSR justification on consumer satisfaction in OOS situations.

3.2.2 CSR Skepticism

Previous research indicates that consumer perception of and reaction to CSR is negatively affected by CSR skepticism. The definition of skepticism is “a person’s tendency to doubt, disbelieve and question”(Skarmeas & Leonidou, 2013, p. 1832). According to Mohr et al. (1998), skeptic people only change their minds based on ample evidence. The construct can be classified into two viewing angles. The first is dispositional skepticism, referring to an individual trait of a person that is stable throughout different situations (Obermiller et al., 2005). The second is situational skepticism, referring to a temporary state of distrust that has nothing to do with a person’s individual trait (Patel et al., 2017). Therefore, CSR skepticism can either express a permanent and general distrust towards CSR or a distrust that results from a momentary psychological reaction caused by a situation or the way the CSR initiative is communicated (Ham & Kim, 2020).

Due to perceived corporate hypocrisy and the feeling of consumers that a company is rather window dressing than actually implementing change, consumers become

prudent with companies CSR claims (Ramasamy et al., 2020). The misleading of consumers through practices like greenwashing enhance this problem. For consumers, it gets harder to judge whether a company is truly responsible or solely using CSR as a promotion. Following, the tendency to scrutinize the benefits of a CSR initiative on the society or the environment arises (Foreh & Grier, 2003).

Prior research shows that skepticism can lead to negative word of mouth and lower resilience to negative information (Skarmeas & Leonidou, 2013). Further, skepticism about the reward of socially responsible products can lead to lower purchase intentions and consumers' attitudes towards a firm (Connors et al., 2017; Elving, 2010; Leonidou & Skarmeas, 2017). Additionally, the reputation of a company can harm the reputation of a brand and a company (Elving, 2010; Rim & Kim, 2016).

Since skepticism towards CSR initiatives can lead to several negative outcomes for firms and can suppress consumers' perception of CSR initiatives of firms, Isa et al. (2019) plead for a closer examination of the moderating effect of consumer skepticism in different research areas.

Deriving from previous findings on the negative effect of CSR skepticism, we expect that the difference in CSR skepticism of consumers will have an impact on their satisfaction given a CSR justification in a stockout situation. Thus, we hypothesize that:

H3: The higher the CSR skepticism the weaker is the influence of CSR as justification for a stockout situation on consumer satisfaction.

3.3 Conceptual Model

The previous subchapters aimed to provide a clear understanding of the constructs and lay ground for the development of the complete conceptual framework of this study. Figure 5 illustrates the final conceptual model combining the main pathway of research – the influence of a CSR justification on consumer satisfaction in a stockout situation – with the moderating effect of human values (self-enhancement vs. self-transcendence) and CSR skepticism. Further, control variables are included:

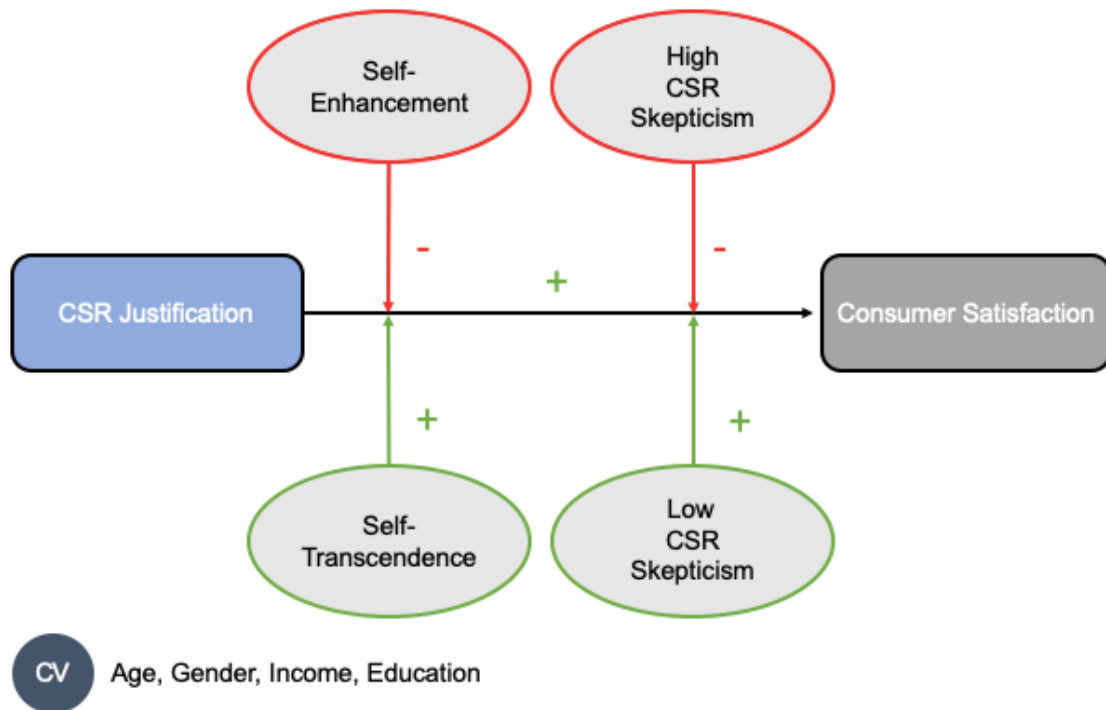


Figure 5: Conceptual model

Concerning to the preceding literature review, the effects illustrated in red show a negative relationship, while the effects illustrated in green show a positive relationship.

4 Empirical Study

4.1 Methodology and Experimental Design

The data collection was designed as a quantitative sociological online experiment to test the effect of CSR-related anti-food-waste ambitions on consumer satisfaction in a stockout situation. Therefore, a web-based scenario was developed where the respondents were exposed to a virtual stockout situation in grocery markets and randomly received two different explanations regarding the problem. The scenarios obtain different “levels” of the independent variable (in this case the CSR-related anti-food-waste efforts). The first scenario contained an imaginary situation in which the participant, who is looking for a certain product on his or her shopping list, enters a grocery store and finds an empty shelf. Thereupon, after asking a staff member, the participant gets the information that the product is out of stock and the staff member apologizes. The second scenario includes the same setting only with the addition that the participant receives the information that the supermarket started a new CSR initiative to avoid food waste through the reduction of abundance supply. The first scenario represents the control group while the second scenario includes the aspect of CSR as a justification for the stockout⁴. The participants were then asked to imagine themselves in the given situation of the scenario and followingly asked to fill out a questionnaire to capture the effect of the manipulated CSR information on consumer satisfaction and the moderating effects of CSR skepticism and the human values of self-enhancement vs. self-transcendence.

As mentioned above the manipulation of the independent variable (CSR) was conducted via the scenario technique. This technique has been widely used, especially in marketing research, in the past years (Steinhoff, 2014). Eroglu (1987, p. 236) defines a scenario as “a brief, well-structured, written description that is designed to induce a particular descriptive and/or event-centered situational context.” Through the scenario technique, it is possible to manipulate the independent variable in a systematic and efficient way. Further, internal validity is heightened through the possibility to control for confounding variables (Steinhoff, 2014).

⁴ see Appendix A for scenarios

4.2 Data Collection

A standard way to collect empirical data is through surveys (Hair, 2007). Following, the empirical data for the presented study was collected via an online survey. Web-based surveys can be differentiated into two types, a target web survey, and a self-selected survey. The first type allows the researcher to select participants and send out links for participation. This allows the researcher control over the sample but at the same time pones the problem that it is (perceived) less anonymously than a self-selected survey. A self-selected survey implies that the researcher has no control over who participates in this study. Hereby, a link is posted, for example on social media or forwarded via messenger apps, inviting participants to take part in an online survey.

Some of the biggest advantages of online surveys are the low costs involved, expanded geographic coverage, and rapid data collection. The method ensures high accessibility of test persons and followingly increases the chances of reaching people with different sociographic backgrounds. Additionally, a bigger sample size can be reached, which improves statistical power. Further, the respondents profit from this method. Since the experiment is performed online, respondents can participate any time from any place. Since the available time to conduct a study, especially for university projects, is often limited this is an important advantage. Further, since no interviewer is necessary, web-based surveys tend to be perceived as more anonymous by the respondents and interviewer effects do not occur. This might have a positive effect on the respondent rate especially if the included questions are sensible or personal (Wagner & Hering, 2014).

Disadvantages need to be addressed as well. The fact that most elderly persons are not very familiar with using the internet, makes it harder to reach this segment of respondents (Wagner & Hering, 2014). Users of the internet tend to be younger, predominantly male, have a higher income, and a higher educational qualification than the average total population (Baur & Blasius, 2014). Likewise, the possibility to ask questions is only possible via E-Mail. Followingly, a simple and understandable formulation of the questions as well as pre-testing the scenarios is important. Further, a certain suspiciousness or distress from respondents, especially when personal or sensible questions arise, needs to be taken into account (B. Blumberg et al., 2011).

In this study, a self-selected web survey is used. The survey was created via the website unipark.com. Afterwards, the link to the survey with a brief description was

distributed via social media and messenger apps (including Facebook, WhatsApp, LinkedIn and Instagram) to reach respondents that are as diverse as possible.

4.3 Respondents

The study was conducted with respondents from Austria and Germany. Due to time and costs restraints as well as the restrictions imposed by the Covid-19 pandemic the chosen sampling method for this thesis is convenience sampling. Self-selection sampling, as well as snowball-sampling, has been used to recruit subjects. Although convenience samples are not representative and therefore a generalization of the results is not possible, measures have been applied to reduce as far as possible the bias resulting from convenience sampling. Response rates have been increased through the incentive of mutual help on finding respondents, through multiple contacts to remind people to fill out the survey, and through the clear demonstration of the affiliation of the study to the University of Vienna. Even though a convenience sample is not representative, Greenberg (1987) points out that even if a sample is representative, it does not imply that it is generalizable. Further, Greenberg states that external validity can only be ensured through a comparison of different studies, not by just one single study (Greenberg, 1987). Followingly, convenience samples can provide a first understanding of psychological processes and lay ground for future research. Furthermore, several other studies in the fields of CSR and consumer satisfaction have used student samples and convenience samples as well (e.g. Chung et al., 2015b; Fatma et al., 2016; Irshad et al., 2017). Consequently, a comparison of the results of this study with prior research is possible.

The sample of the pre-test included 75 respondents (35 for the first scenario and 40 for the second scenario). Both pre-test and questionnaire were originally developed in German and then translated to English. Of the 186 survey questionnaires distributed, 150 were found valid for further analysis. Participants who canceled the questionnaire or had their main residence neither in Austria nor in Germany were excluded.

Out of these 150 respondents, 74 (49.3%) were subject to the general scenario, while 76 (50.7%) were subject to the CSR/anti-food-waste ambition scenario. As a result, the intended equality of group size was achieved. The sample consists of 34 (22.7%) respondents located in Austria and 116 (77.3%) respondents located in Germany. The average age of respondents was 33.9 (SD= 14.71) (with two missing values). Out of the 150 respondents, 64 (42.7%) were male, while 83 (55.3%) were female. 34.9% of

the respondents have a monthly household income above 2500 € (with four missing values). 83 (55.3%) of 150 were postgraduates and no respondent had less than secondary education. Therefore, the sample is rather highly educated and with an above-average monthly household income.

4.4 Measures

Pre-Test and Manipulation Checks

To ensure the efficient manipulation of the independent variable, the scenarios were pre-tested and manipulation checks were carried out. Initially, both groups were asked two general questions regarding the credibility of the presented scenario. This aspect included the questions: “I believe that a situation like this can happen in real life. This situation seems realistic to me.” To measure their perception of CSR of the supermarket two items are used: “The supermarket seems socially responsible to me. The supermarket takes responsibility and acts socially.” Additionally, the second group (which received the CSR scenario) was asked to answer two additional questions regarding the understanding of the CSR aspect and the understanding of the anti-food-waste ambitions of the grocery presented in the scenario. The following items are used for the measurement: “I classify the initiative of the supermarket as socially responsible. A supermarket with such an initiative takes responsibility and acts socially. The supermarket's initiative helps to combat food waste. The supermarket's initiative will help reduce food waste.” All items were measured with a seven-point scale from 1 to 7 with endpoints of strongly disagree – strongly agree.

Consumer Satisfaction

To measure consumer satisfaction two different scales are used. The first scale measures the overall satisfaction of consumers after experiencing the situation described in the scenarios. It is measured through four seven-point semantic differential items from 1 to 7, anchored by dissatisfied/satisfied, displeased/pleased, frustrated/contented, and terrible/delighted (D. J. Kim et al., 2009). The coefficient alpha is 0.805. Therefore, the internal consistency is satisfying. The second scale measured the satisfaction with the retailer. Four seven-point scales from 1 to 7 with endpoints of strongly disagree – strongly agree for the first three items and dissatisfied/satisfied for the last item are used to measure the satisfaction with the retailer after experiencing the situation described in the scenarios. The items are “I am

happy with my decision to buy in this store”, “My choice of this store was a wise one”, “I feel good about my decision to buy in this store” and “Taking everything into consideration, how do you feel about the service you received in this store” (Grubor et al., 2017). The coefficient alpha is 0.900. Followingly, the internal consistency is satisfying.

To gain further insights, the two scales are combined to a scale measuring the general consumer satisfaction including the retail store and the situation. The coefficient alpha is 0.899. Thus, the internal consistency is satisfying.

Self-Enhancement vs. Self-Transcendence

Four items were used to measure self-enhancement, two items for the dimensions of achievement and two items for the dimension of power. The respondents were asked to evaluate on a seven-point scale from 1 to 7 how much a described person resembles themselves. The items for power are “It is important to him/her to be rich. He/She wants to have a lot of money and expensive things.” and “It is important to him/her to be in charge and tell others what to do. He/She wants people to do what he/she says”. The items for achievement include “It is very important to him/her to show his/her abilities. He/She wants people to admire what he/she does.” and “Being very successful is important to him/her. He/She likes to impress other people.” The four items to measure self-enhancement have a coefficient alpha of 0.740. Followingly, the internal consistency is satisfying.

To measure self-transcendence again, two items for the dimensions of benevolence and two items for the dimension of universalism are used⁵. As for self-enhancement, the respondents were asked to evaluate on a seven-point scale from 1 to 7 how much a described person resembles themselves. The items for benevolence are “It's very important to him/her to help the people around him/her. He/She wants to care for other people.” and “It is important to him/her to be loyal to his/her friends. He/she wants to devote himself/herself to people close to him/her.”. The four items to measure self-

⁵ The original scale includes a third item: “He/She strongly believes that people should care for nature. Looking after the environment is important to him/her.”. This item was excluded due to its proximity to the CSR/environmental topic. Since this item was expected to bias the results, as anti-food-waste ambitions are to be considered a pro-environmental initiative, it was excluded.

transcendence have a coefficient alpha of 0.707. Hence, the internal consistency is satisfying.

CSR Skepticism

To measure CSR skepticism four seven-point scales from 1 to 7 with endpoints of strongly disagree – strongly agree are used. The items include “It is doubtless that this is a socially responsible retailer”, “It is certain that this retailer is concerned to improve the well-being of society”, “It is sure that this retailer follows high ethical standards” and “It is unquestionable that this retailer acts in a socially responsible way” (Leonidou & Skarmas, 2017). The coefficient alpha is 0.915. Consequently, the internal consistency is satisfying.

5 Analysis and Results

5.1 Analysis of the Pre-Test

The sample of the pre-test included 75 respondents (35 for the first scenario and 40 for the second scenario). To ensure that the two questions on each regarding the constructs of credibility, perception of CSR, understanding of CSR initiative and understanding of the anti-food-waste ambition were measuring the same constructs, Cronbach's alpha was measured. For all constructs the internal consistency was satisfying. The credibility of both scenarios was given, even though the credibility for the CSR scenario was lower than for the general scenario ($M_{\text{gen}}=5.69$, $SD=1.32$; $M_{\text{CSR}}=3.79$, $SD=1.75$). Further, participants of group 2 understood the CSR initiative ($M=5.89$, $SD=1.34$) as well as the anti-food-waste ambition of the grocery store ($M=5.70$, $SD=1.29$). An independent t-test was used to identify whether the scenarios were perceived differently on a CSR base. The results show that there is a significant difference between the mean of the general scenario ($M=4.60$) and the CSR scenario ($M=5.70$) ($t\text{-value}(73) = -3.22$; $p < 0.05$) regarding the perception of CSR. Thus, the manipulation of the CSR aspect was successful⁶.

5.2 CSR as a Justification and Consumer Satisfaction in an OOS Situation (Main effect)

In this chapter, the effect of CSR as a justification for a stockout situation and its effect on consumer satisfaction is investigated. To investigate if the consumers' satisfaction with the situation differs whether respondents obtained an anti-food-waste, and therefore CSR-related, explanation for the stockouts or just the fact that the product is out of stock, an ANOVA was carried out. Hypothesis 1 proposed that CSR as a justification for stockouts has a positive effect on consumer satisfaction. Before conducting the ANOVA, the assumption regarding normality and homogeneity of variances was checked. After carrying out the Shapiro-Wilk test, we can assume that both groups are normally distributed ($p > 0.05$). Further, the homogeneity of variances was tested by applying the Levene's test, through which ($p > 0.05$) the assumption is

⁶ see Appendix D for results of the pre-test

met. Based on the ANOVA, a statistically significant difference $F(1,148) = 5.72$, $p < 0.01^7$, $\eta^2 = 0.04$ in consumers' satisfaction, between the group without CSR-related explanation ($M_{\text{gen}} = 3.77$, $SD = 1.20$) and the group with the anti-food-waste related explanation ($M_{\text{CSR}} = 4.27$, $SD = 1.35$), regarding the stockout situation was found. Followingly, consumers who obtained an explanation including the aspect of anti-food-waste ambitions were more satisfied with the situation than consumers who did not get any explanation.

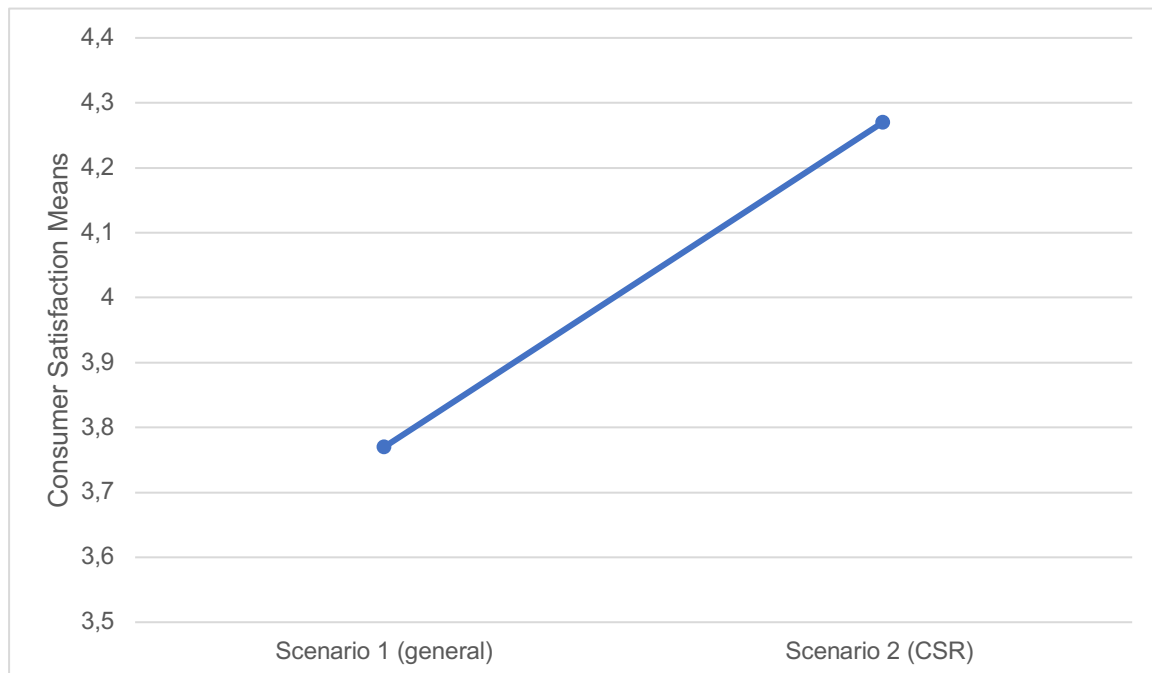


Figure 6: Scenarios and consumer satisfaction (means)⁸

Figure 6 illustrates the difference of the mean consumer satisfaction, differentiating between scenario 1 (without CSR justification) and scenario 2 (with CSR justification). Respondents who received a CSR-related explanation for the stockout situation show a higher consumer satisfaction than respondents without a CSR justification. Based on the findings we can accept H1 and conclude that CSR as a justification for stockouts seems to heighten consumer satisfaction.

⁷ Significance level divided by two because of directional hypothesis

⁸ Consumer Satisfaction was measured on a 7-point Likert Scale (1=low CS / 7= high CS); Respondents: 150

5.3 Moderation

To analyze the moderation effects, a multiple regression analysis was used. According to research (e.g. Frazier et al., 2004; West et al., 1996), a multiple regression is to be preferred over an ANOVA since it allows higher flexibility for the encoding of categorically scaled variables. One can presume that a moderator consolidates the effect of an independent variable if the interaction between the product of the independent variable and the dependent variable is significant. Additionally, a moderator should not correlate with the independent variable and dependent variable and should be included in the model as an independent variable (Baron & Kenny, 1986).

In the case of a categorical variable as the independent variable with an experimental condition (e.g. our case with two artificially created scenarios), it is advisable to aim for an equal number of participants for each scenario. This aims to prevent a reduced test power (Frazier et al., 2004). In our case, the respondents were nearly equally distributed with 74 respondents in the group of scenario 1 and 76 respondents in the group of scenario 2. Further, the authors presuppose equal error variances across the experimental groups. In the case of unequal sample sizes and unequal error variances, the problem of over- or underestimation of the moderating effect may arise (Frazier et al., 2004). In the case of consumer satisfaction as dependent variables, it can be reported that sample sizes, as well as error variances⁹, were equal for the two measurement levels.

Since the independent variable and the moderator variables are categorical and discrete data, no standardization for the analysis was necessary (Frazier et al., 2004; West et al., 1996). Nevertheless, to compensate for the potential problem with multicollinearity, the moderators were mean-centered before conducting a multiple regression. By subtracting the mean of the variable from the observations, the data is converted from raw-score to deviation-score scaling. This mean-centering procedure bears multiple advantages when performing a regression analysis. First, through reducing the collinearity between main effects and the interaction term (the product of the independent predictor variable and the moderator variable). This enhances the

⁹ Levene's Test: $F(1,148) = 0.80, p > 0.05$

stability of the standard errors and the regression estimates. Second, the interpretation of the interaction is simplified after mean-centering the variables (Little et al., 2007). Even though research is inconclusive if mean centering addresses or prevents multicollinearity issues and some argue that this procedure does not solve the multicollinearity problem (e.g. Echambadi & Hess, 2007; Kromrey & Foster-Johnson, 1998), prior research of Vosgerau and Gatignon (2007) argues that mean centering could help to tackle arbitrary origin problems of interval scales without defined zero points. This includes Likert Scales, which are used in our model.

The independent predictor variable, referring to whether a respondent received scenario 1 or 2, is a dummy variable. Hereby, scenario 1 is coded with 1, and scenario 2 is coded with 2. This dummy variable is used for the following multiple regression analyses, to test for possible moderating effects regarding the direct effect of CSR as a justification for stockouts on consumer satisfaction.

5.3.1 The Moderating Effect Self-Enhancement

The first multiple regression analysis investigates the possible moderating effect of self-enhancement on the relationship between anti-food-waste ambitions (CSR) as a justification for a stockout and consumer satisfaction. Self-Enhancement refers to the tendency of a person to prioritize him- or herself over others and to look at the world from a self-oriented point of view. First, only the dummy variable, as well as the moderator variable, were included in the model. In the second step, the interaction term entered the model. Table 3 shows the regression coefficients of the two multiple regression and the changes of the models after entering the interaction term:

Table 3: Moderating role of self-enhancement¹⁰

	Regression 1	Regression 2
	F(2,147)=4.73**	F(3,146)=4.05**
	R ² =.06	R ² =.08
Scenario Manipulation	.171*	.173**
Self-Enhancement	-.154*	.247 ^{ns}
Scenario * Self-Enhancement		-.420 ^{ns}

The interaction term in the second regression was not significant. Therefore, it can be concluded that self-enhancement neither strengthens nor weakens the influence of CSR as a justification for stockouts on consumer satisfaction. However, the results of the first regression show that self-enhancement plays a role (as the regression coefficient is significant) when it comes to consumer satisfaction, but as a predictor variable. Further, the scenario manipulation is significant which supports the findings that a CSR-related explanation for a stockout situation has a positive effect on consumer satisfaction.

5.3.2 The Moderating Effect of Self-Transcendence

This regression was computed to check for a possible moderation effect of self-transcendence on the relationship between anti-food-waste ambitions as a justification for a stockout and consumer satisfaction. Self-Transcendence refers to the tendency of a person to prioritize others over him- or herself and to look at the world from an other-oriented point of view. The same approach as in chapter 5.3.1 was followed.

¹⁰ Table shows standardized regression coefficients; moderating variable was mean-centered

Dependent variable = Consumer Satisfaction

* = $p < .05$, ** = $p < .01$, ns = not significant

Significance level divided by two because of directional hypothesis

For Standard Deviation, see Appendix

Statistical Assumptions were met (see Appendix)

Table 4 shows the regression coefficients of the two multiple regression and the changes of the models after entering the interaction term:

Table 4: Moderating role of self-transcendence¹¹

	Regression 1	Regression 2
	F(2,147)=4.79**	F(3,146)=3.21**
	R ² =.06	R ² =.06
Scenario Manipulation	.192**	.192**
Self-Transcendence	.155*	.079 ^{ns}
Scenario * Self-Transcendence		.080 ^{ns}

The interaction term in the second regression is not significant. Therefore, it can be concluded that self-transcendence neither strengthens nor weakens the influence of CSR as a justification for stockouts on consumer satisfaction. However, the results of the first regression show that it can be concluded that self-transcendence plays a role (as the regression coefficient is significant) when it comes to consumer satisfaction, but as a predictor variable. Further, the scenario manipulation is significant which supports the findings that a CSR-related explanation for a stockout situation has a positive effect on consumer satisfaction.

5.3.3 The Moderating Effect of CSR Skepticism

Based on the literature it was assumed that respondents with higher skepticism towards CSR could moderate the effect of a CSR-related explanation of a stockout situation on consumer satisfaction. Skepticism towards CSR refers to a person's

¹¹ Table shows standardized regression coefficients; moderating variable was mean-centered

Dependent variable = Consumer Satisfaction

* = $p < .05$, ** = $p < .01$, ns = not significant

Significance level divided by two because of directional hypothesis

For Standard Deviation, see Appendix

Statistical Assumptions were met (see Appendix)

tendency to doubt, disbelieve and question a company's CSR efforts. Again, two regressions were computed to determine the first-order effect and moderating effect of CSR skepticism:

Table 5: Moderating role of CSR skepticism¹²

	Regression 1	Regression 2
	F(2,147)=10.31**	F(3,146)=6.95**
	R ² =.12	R ² =.13
Scenario Manipulation	.078 ^{ns}	.077 ^{ns}
CSR Skepticism	.315**	.180 ^{ns}
Scenario * CSR Skepticism		.142 ^{ns}

From the results of the first regression, it can be concluded that CSR skepticism plays a role (as the regression coefficient is significant) when it comes to consumer satisfaction. Since CSR skepticism is coded (as mentioned above) from 1 (very skeptical) to 7 (not skeptical at all), the data shows, that less skeptical consumers show a higher satisfaction. By including the interaction term in the regression, no moderating effect of CSR skepticism on the effect of CSR as a justification for a stockout on consumer satisfaction could be identified. Followingly, CSR skepticism might have an influence as independent predictor, but not as moderating variable. In this regression, the influence of CSR as a justification for stockouts is not supported, since the scenario manipulation is not significant.

¹² Table shows standardized regression coefficients; moderating variable was mean-centered

Dependent variable = Consumer Satisfaction

* = p<.05, ** = p<.01, ns = not significant

Significance level divided by two because of directional hypothesis

For Standard Deviation, see Appendix

Statistical Assumptions were met (see Appendix)

5.3.4 Influence of Control Variables

To gain further insights, the control variables of age, gender, income, and education have been included in the conceptual model. In the following, the effect of these control variables on the dependent variable, as well as their influence on the effect of CSR as a justification for stockout situations on consumer satisfaction is tested.

Age

To test the influence of age on consumer satisfaction as well as its moderation on the effect of CSR as a justification in a stockout situation on consumer satisfaction, two regressions were computed.

Table 6: Moderating effect of age¹³

	Regression 1	Regression 2
	F(2,145)=3.26*	F(3,146)=2.32 ^{ns}
	R ² = .04	R ² = .05
Scenario Manipulation	.202*	.201 ^{ns}
Age	.039 ^{ns}	.214 ^{ns}
Scenario * Age		-.184 ^{ns}

The moderator effect of age regarding the effect of CSR as a justification for a stockout situation could not be found. Age in general, also as a predictor for consumer satisfaction, does not play a role. However, the regression coefficient for the CSR manipulation was significant – even though only in the first regression – underlying the effect of CSR as a justification for a stockout situation on consumer satisfaction.

¹³ Table shows standardized regression coefficients; moderating variable was mean-centered

Dependent variable = Consumer Satisfaction

* = $p < .05$, ** = $p < .01$, ns = not significant

For Standard Deviation, see Appendix

Statistical Assumptions were met (see Appendix)

Gender

To identify whether the gender of respondents has either a direct influence on consumer satisfaction or moderates the effect of CSR as a justification for stockouts on consumer satisfaction, again two regressions were computed.

Table 7: Moderating effect of gender¹⁴

	Regression 1	Regression 2
	$F(2,147)=2.84^{ns}$	$F(3,146)=1.91^{ns}$
	$R^2=.04$	$R^2=.04$
Scenario Manipulation	.194 ^{ns}	.255 ^{ns}
Age	-.006 ^{ns}	.059 ^{ns}
Scenario * Age		-.098 ^{ns}

The results reveal that gender has no influence on the consumer satisfaction of the respondents, neither as moderator nor as an independent predictor.

¹⁴ Table shows standardized regression coefficients; moderating variable was not mean-centered

Dependent variable = Consumer Satisfaction

* = $p < .05$, ** = $p < .01$, ns = not significant

For Standard Deviation, see Appendix

Statistical Assumptions were met (see Appendix)

Income

To evaluate the possible influence of income on consumer satisfaction or its moderating effect on the relationship of CSR as a justification for a stockout situation and consumer satisfaction, we performed two regressions.

Table 8: Moderating effect of income¹⁵

	Regression 1	Regression 2
	F(2,143)=3.19*	F(3,142)=2.28 ^{ns}
	R ² =.04	R ² =.05
Scenario Manipulation	.175*	.175 ^{ns}
Income	-.092 ^{ns}	.082 ^{ns}
Scenario * Income		-.183 ^{ns}

Considering the results of the regressions we can conclude that the moderator effect of income regarding the effect of CSR as a justification for a stockout situation could not be found. Income in general, also as a predictor for consumer satisfaction, does not play a role. However, the regression coefficient for the CSR manipulation was significant – even though only in the first regression – underlying the effect of CSR as a justification for a stockout situation on consumer satisfaction.

Education

As a final step, the possible influence of education on consumer satisfaction or as a moderating variable was evaluated. Again, two regression were conducted.

¹⁵ Table shows standardized regression coefficients; moderating variable was mean-centered

Dependent variable = Consumer Satisfaction

* = $p < .05$, ** = $p < .01$, ns = not significant

For Standard Deviation, see Appendix

Statistical Assumptions were met (see Appendix)

Table 9: Moderating effect of education¹⁶

	Regression 1	Regression 2
	F(2,147)=3.31*	F(3,146)=2.19 ^{ns}
	R ² =.04	R ² =.04
Scenario Manipulation	.184*	.184 ^{ns}
Education	-.077 ^{ns}	.075 ^{ns}
Scenario * Education		-.002 ^{ns}

The results indicate that the moderator effect of education regarding the effect of CSR as a justification for a stockout situation could not be found. Education in general, also as a predictor for consumer satisfaction, does not play a role. Nevertheless, the regression coefficient for the CSR manipulation was significant. Even though it was only significant in the first regression, it underlies the effect of CSR as a justification for a stockout situation on consumer satisfaction.

¹⁶ Table shows standardized regression coefficients; moderating variable was mean-centered

Dependent variable = Consumer Satisfaction

* = $p < .05$, ** = $p < .01$, ns = not significant

For Standard Deviation, see Appendix

Statistical Assumptions were met (see Appendix)

5.3.5 Overview of Hypothesis

Table 10: Overview of hypothesis

	Accepted	Rejected
H1: CSR as a justification for a stockout situation has a positive effect on consumer satisfaction.	✓	
H2a: Self-Transcendence positively moderates the effect of CSR justification on consumer satisfaction in a stockout situation.		X
H2b: Self-Enhancement negatively moderates the effect of CSR justification on consumer satisfaction in OOS situations.		X
H3: The higher the CSR skepticism the weaker is the influence of CSR as justification for a stockout situation on consumer satisfaction.		X

6 Discussion

The issue of food waste has gained a lot of attention in the past and is oftentimes referred to as one of the most important issues of our time. Therefore, the effect of CSR-related anti-food-waste ambitions on consumer satisfaction needs to be evaluated. This study focuses on the impact of CSR-related anti-food-waste ambitions as a justification for stockouts on consumer satisfaction.

6.1 Practical Implications

First of all, it was found that justifying the stockout with anti-food-waste ambitions influences consumer satisfaction. More precisely, the results show that whether the respondents obtained an explanation including CSR-related information, that states that the goal is to prevent food-waste, or solely obtained the information that a product was out of stock, influenced the respondent's satisfaction. Respondents who obtained the anti-food-waste related explanation showed a higher consumer satisfaction ($M_{CSR} = 4.27$, $SD = 1.35$) than respondents who only obtained the information about the stockout ($M_{gen} = 3.77$, $SD = 1.20$). This could tell us, that customers do appreciate a firm's effort to avoid food waste and therefore feel less dissatisfied facing a stockout situation which is usually accompanied by inconvenience.

Further, it was aimed to test some potential moderating effects which might influence the relationship between the justification of a stockout through anti-food-waste ambitions and consumer satisfaction.

First, the influence of human value dimensions (more precisely self-enhancement and self-transcendence) on the relationship between anti-food-waste-related justifications for a stockout and consumer satisfaction was tested. Neither self-enhancement values nor self-transcendence values of consumers influence this relationship. Based on this, one could argue that the value system of a consumer (at least regarding these two values) has no influence on how satisfied or dissatisfied a consumer is after obtaining an anti-food-waste-related justification for a stockout.

Secondly, the influence of CSR skepticism on this relationship was tested. Again, no effect on the relationship could be identified. Consequently, the extent of a consumer's skepticism towards CSR does not affect how satisfied the consumer is after obtaining an anti-food-waste-related justification for a stockout.

Regarding the control variables of age, gender, income, and education no moderating effect was found either. This means that neither age, nor gender, nor income, nor education influence consumer satisfaction after obtaining an anti-food-waste-related justification for a stockout.

6.2 Theoretical Implications

From the theoretical point of view, the results of this thesis underline the importance of anti-food-waste ambitions for consumers in stockout situations. Since further research on how to reach a sustainable food system while keeping the customer satisfied is of high interest and importance, this thesis lays the ground for further research in this area. Following, the findings of this thesis add insights into the field of food waste research, where research on the retail sector of this problem (Lebersorger & Schneider, 2014) and especially the examination of practical intervention is still lacking (Muth et al., 2019).

Additionally, this thesis contributes to the research field of OOS situations and their consequences. Even though a reduction of stockouts may be desirable, stockout rates over the last years have rarely changed. Therefore, further research on dampening the negative effects of stockouts is necessary. The results provide insight into how anti-food-waste-related CSR measures can reduce the negative consequences of stockouts.

Further, the relevance of CSR initiatives and their positive effect on consumer satisfaction is highlighted. Our findings are in high accordance with prior research, confirming the positive impact of CSR on consumer satisfaction (e.g. Chung et al., 2015a; Luo & Bhattacharya, 2006; Park et al., 2017) and also confirming the ability of CSR efforts reducing negative consequences after a dissatisfactory incident (e.g. Joireman et al., 2015; J. Kim & Park, 2020).

Moreover, the findings of our study underline the argument that CSR adds value to a product or a service in the eyes of consumers. Since consumer satisfaction was higher for the group receiving a CSR-related scenario ($M_{\text{CSR}} = 4.27$, $SD = 1.35$) than for the group without a CSR explanation ($M_{\text{gen}} = 3.77$, $SD = 1.20$) it could be argued that the feeling of acting socially responsible adds value for consumers. This supports the findings of prior research such as from Sen and Bhattacharya (2001) or Pelozo and Shang (2011). Additionally, the results support findings of Aulia et al. (2016), Lee et al.

(2007), and Slack et al. (2020) who found that perceived value enhances consumer satisfaction. Nevertheless, it has to be mentioned that this thesis argues based on the perceived value theory, but a measurement of whether the respondents perceive the CSR initiative as an additional value did not occur.

Concerning the research on human values, the findings of this study are not in line with prior research but still add insight. Even though Hunt and Vitell (1986), Romani et al. (2013), or González-Rodríguez et al. (2019) revealed an influence of self-enhancement and self-transcendence on the perception of CSR, the results do not show moderating effects for either of the values. Even so, the findings show that both could work as predictors for consumer satisfaction.

Lastly, this study contributes to the literature on CSR skepticism. Again, contradicting prior research, no moderation effect of CSR skepticism on the relationship between CSR as a justification for a stockout situation and consumer satisfaction was found. Based on previous research, e.g. Isa et al. (2019), who identified CSR skepticism as a negatively moderating factor for ethical purchase intention, a different outcome was expected. Still, the findings of this study suggest that CSR skepticism may work as a predictor for consumer satisfaction.

6.3 Managerial Implications

Since the results show that a CSR-related (in this case anti-food-waste) initiative can dampen consumer dissatisfaction in a stockout situation, it was shown that consumers value these ambitions of retailers, which reflects in a higher satisfaction even in a situation where the desired product is not available. Therefore, the findings of this study suggest guidelines for a successful implementation of anti-food-waste initiatives in the food retailing industry. Food retailers can easier contribute to fighting food waste by reducing the abundance of supply. The feared dissatisfaction of consumers can be mitigated through clear and upfront communication of the CSR-related reason. Due to the retailers' strong position in the sector of food production, the goal to reduce food waste should be promoted and reflected in marketing strategies. Encouraging consumers, to act favorably and to initiate sustainable practices while still being economically successful, should be the goal and increases chances to gain competitive advantage. This allows tackling this critical issue throughout different stages of the food supply chain at the same time as the societal discourse on

counteractive measures is intensified. Based on this, we recommend food retailers engage in such initiatives and help to develop a sustainable food system.

7 Conclusion

The current situation with an annual food waste between 40 to 45 mtons per year is alarming (Gustavsson et al., 2011).. This results in severe environmental and societal problems as well as causing a huge financial loss for retailers. The problem of food waste is in big parts allocated at the end of the supply chain and linked to the managerial decisions of retailers (Del Giudice et al., 2016). Prior research has pointed out that evaluating consumers' perception and their acceptance of measures against food waste is needed (Willersinn et al., 2015). Because of the particular attributes of food, strategies like reuse or recycling are not feasible. Therefore, the reduction is the only possible strategy in the battle against food waste. The strategy of the reduction of supply is rather under-researched since retailers fear that through restriction of the product choice, consumers might be dissatisfied. As research shows, stockouts are a crucial reason for consumer dissatisfaction. Since dissatisfied consumers are to be prevented due to resulting negative attitudinal and behavioral responses from consumers, it is necessary to evaluate measures that can dampen the dissatisfaction of consumers when implicating anti-food-waste efforts. That is why the study focused on the impact of CSR-related anti-food-waste ambitions as a justification for stockouts on consumer satisfaction. This thesis is, to the knowledge of the thesis' author, the first research aiming to identify a way to fight food waste through a reduction of supply, while taking into account consumers' emotional reactions to the consequences of the reduction.

This study aimed to get insights into the influence of CSR initiatives on consumer satisfaction in a stockout situation. In detail, this study was carried out to answer the research question: *Can anti-food-waste efforts enhance consumer satisfaction in case of a stockout?*

In the conducted quantitative online survey, data was collected to research the four hypotheses, regarding the influence of CSR-related anti-food-waste efforts on consumer satisfaction in an OOS situation, and the moderating effect of self-enhancement, self-transcendence, and CSR skepticism on that relationship.

As a conclusion of this research, it remains to be stated, that the main aim of the research was reached, confirming that consumers feel less dissatisfied facing a stockout situation if the stockout is due to anti-food-waste ambitions. However, the values of self-enhancement and self-transcendence as well as the skepticism of

consumers towards CSR did not show to influence the relation between the CSR-related anti-food-waste ambition justification of an OOS situation and consumer satisfaction.

8 Limitations and Future Research

The results and the interpretation of this thesis must be considered in the context of its limitations. First, the design of the study is based on scenarios. This allowed us to manipulate the independent variable effectively, while controlling possible confounding variables. Even though this strengthens the causality, ecological validity is an issue. In a hypothetical situation like a scenario, in contrast to a field study, participants do not feel the loss of time or the actual dissatisfaction of not being able to find a product they desire or need on the shelves. Further, scenarios are a “simulation”. Followingly, the respondents may experience the situation more from an observer’s perspective than feeling actually involved. Therefore, the respondents may answer from a rather cognitive than emotional perspective.

Secondly, this thesis only measured consumer satisfaction but no behavioral consequence of this satisfaction. Carvalho et al.’s (2010) findings suggest that CSR initiatives lower store switching rates. Investigating if the heightened satisfaction through anti-food-waste ambition also leads to lower store switches or a higher repurchase rate would be of interest. Further research should replicate the idea of this research in a field study, to test if respondents react in congruence with our findings. Moreover, we researched the impact of a onetime stockout situation. In reality, stockouts in a grocery store can happen multiple times or affect multiple products a customer desires. Research on product failure has shown, that CSR capability to buffer the negative effect of the failure is no longer working if this failure is repetitive (Einwiller et al., 2006). If this holds true for repetitive stockout situations, should be a focus of future research.

Thirdly, it is necessary to bear the data collection in mind. Since we collected data, due to monetary, time and Covid-19 restrictions, through a convenience sample via social media and e-mail, the generalizability of the findings is rather limited. Moreover, due to the chosen method, the number of participants belonging to the older age group is quite small (only six respondents over 65). The respondents were rather young with 71.3% younger than 35 and 34% with a monthly net household income above 2.500 Euro. With a sample size larger than 150 respondents, like in our case, generalizability and a more evenly representation of participants could be achieved. Using a web-based questionnaire, questions or further explanations are only possible via e-mail. Further, since we cannot observe the respondents, it is unclear how concentrated and

focused they are while taking part in the study. This can affect the quality of the answers obtained.

Fourthly, the survey was administered to retail consumers in Germany and Austria. Since different countries or cultures can have different expectations of the availability of products or a generally different food shopping behavior, the results may not be generalizable for other countries. The same applies to other types of businesses or services, where consumers may have different expectations than in food retail.

Fifthly, even though the difference of consumer satisfaction between both groups is significant, this difference is rather small ($M_{\text{CSR}} = 4.27$, $SD = 1.35$; $M_{\text{gen}} = 3.77$, $SD = 1.20$). Again, more theoretical and empirical research in this area would help to underpin these results.

Sixthly, one danger that arises when researching advantages through CSR is the problem of “greenwashing”. This phenomenon implies that companies use strategies to promote their environmental or social ambitions even though these may not be true or lead to the desired effect. In our case, misuse of justifying a stockout with anti-food-waste efforts, which are not actually the reason for the shortage, is possible. To prevent this from happening, an officially accredited certificate, for example the organic certificate from the EU, would help to prevent this. It would create reliability for customers as well as diminish the risk for companies, putting a lot of effort in food waste reduction, to lose their competitive advantage to companies who are only pretending to act socially responsible.

List of References

- Aastrup, J., & Kotzab, H. (2010). Forty years of Out-of-Stock research – and shelves are still empty. *The International Review of Retail, Distribution and Consumer Research*, 20(1), 147–164.
- Achrol, R. S., & Kotler, P. (2012). Frontiers of the marketing paradigm in the third millennium. *Journal of the Academy of Marketing Science*, 40(1), 35–52.
- Aguinis, H., & Glavas, A. (2012). What We Know and Don't Know About Corporate Social Responsibility: A Review and Research Agenda. *Journal of Management*, 38(4), 932–968.
- Ailawadi, K. L., Neslin, S. A., Luan, Y. J., & Taylor, G. A. (2014). Does retailer CSR enhance behavioral loyalty? A case for benefit segmentation. *International Journal of Research in Marketing*, 31(2), 156–167.
- Alhouti, S., Wright, S. A., & Baker, T. L. (2021). Customers need to relate: The conditional warm glow effect of CSR on negative customer experiences. *Journal of Business Research*, 124, 240–253.
- Alniacik, E., Moumen, C., & Alniacik, U. (2020). The moderating role of personal value orientation on the links between perceived corporate social performance and purchase intentions. *Corporate Social Responsibility and Environmental Management*, 27(6), 2724–2734.
- Andersen Consulting. (1996). *Where to Look for Incremental Sales Gains: The Retail Problem of Out-of-Stock Merchandise*. The Coca-Cola Retailing Research Council.
- Anderson, E. T., Fitzsimons, G. J., & Simester, D. (2006). Measuring and Mitigating the Costs of Stockouts. *Management Science*, 52(11), 1751–1763.
- Andrews, M., Luo, X., Fang, Z., & Aspara, J. (2014). Cause Marketing Effectiveness and the Moderating Role of Price Discounts. *Journal of Marketing*, 78(6), 120–142.
- Anselmsson, J., & Johansson, U. (2007). Corporate social responsibility and the positioning of grocery brands: An exploratory study of retailer and manufacturer brands at point of purchase. *International Journal of Retail & Distribution Management*, 35(10), 835–856.
- Aschemann-Witzel, J., de Hooze, I. E., Rohm, H., Normann, A., Bossle, M. B., Grønhøj, A., & Oostindjer, M. (2017). Key characteristics and success factors of supply

chain initiatives tackling consumer-related food waste – A multiple case study. *Journal of Cleaner Production*, 155, 33–45.

Aschemann-Witzel, J., de Hooge, I., & Normann, A. (2016). Consumer-Related Food Waste: Role of Food Marketing and Retailers and Potential for Action. *Journal of International Food & Agribusiness Marketing*, 3, 271–285.

Aschemann-Witzel, J., Giménez, A., & Ares, G. (2018). Convenience or price orientation? Consumer characteristics influencing food waste behaviour in the context of an emerging country and the impact on future sustainability of the global food sector. *Global Environmental Change*, 49, 85–94.

Aschemann-Witzel, J., Otterbring, T., de Hooge, I. E., Normann, A., Rohm, H., Almlí, V. L., & Oostindjer, M. (2019). The who, where and why of choosing suboptimal foods: Consequences for tackling food waste in store. *Journal of Cleaner Production*, 236, 117596.

Aulia, S. A., Sukati, I., & Sulaiman, Z. (2016). A Review: Customer Perceived Value and its Dimension. *Asian Journal of Social Sciences and Management Studies*, 3(2), 150–162.

Bacos, J., Beswick, P., Demeure, B., Harrison, N., Siemssen, S., & Trentini, R. (2014). *Reducing Food waste. How can Retailers help?* Oliver Wyman. https://www.oliverwyman.com/content/dam/oliverwyman/global/en/2014/jul/OW_Reducing_Food_Waste.pdf, accessed: 07.04.2021

Bagherzadeh, M., Inamura, M., & Jeong, H. (2014). *Food Waste Along the Food Chain* (OECD Food, Agriculture and Fisheries Papers No. 71; OECD Food, Agriculture and Fisheries Papers, Vol. 71).

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.

Baur, N., & Blasius, J. (Eds.). (2014). *Handbuch Methoden der empirischen Sozialforschung*. Springer Fachmedien Wiesbaden.

Bayle-Tourtoulou, A.-S., Laurent, G., & Macé, S. (2006). *Assessing the Frequency and Causes of Out-of-Stock Events Through Store Scanner Data*.

Bhattacharya, C. B., & Sen, S. (2004). Doing Better at Doing Good: When, Why, and

- How Consumers Respond to Corporate Social Initiatives. *California Management Review*, 47(1), 9–24.
- Bhattacharya, C., & Sen, S. (2003). Consumer-Company Identification: A Framework for Understanding Consumers' Relationships with Companies. *Journal of Marketing - J MARKETING*, 67, 76–88.
- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2011). *Business research methods*. McGraw-Hill Higher Education.
- Blumberg, M., & Dröge, A. (2008). Lohnt sich „gut“ sein? Der „gesellschaftliche Markenwert“ als Treiber von Image und Markenpräferenz. *Markenartikel*, 6, 24–25.
- Boccia, F., & Sarnacchiaro, P. (2018). The Impact of Corporate Social Responsibility on Consumer Preference: A Structural Equation Analysis: A Statistical Model for the Interpretation of consumer's CSR Behaviour. *Corporate Social Responsibility and Environmental Management*, 25(2), 151–163.
- Bolton, L., & Mattila, A. (2014). How Does Corporate Social Responsibility Affect Consumer Response to Service Failure in Buyer–Seller Relationships? *Journal of Retailing*, 91.
- Bolton, R. N., & Drew, J. H. (1991). A Multistage Model of Customers' Assessments of Service Quality and Value. *Journal of Consumer Research*, 17(4), 375–384.
- Boshoff, C., & Leong, J. (1998). Empowerment, attribution and apologising as dimensions of service recovery: An experimental study. *International Journal of Service Industry Management*, 9(1), 24–47.
- Bowen, H. R. (1953). *Social responsibilities of the businessman*; Harper.
- Brehm, J. W. (1966). *A theory of psychological reactance*. Academic Press. <http://books.google.com/books?id=0uN9AAAAMAAJ>, accessed: 07.04.2021
- Bridoux, F., Stofberg, N., & Den Hartog, D. (2016). Stakeholders' Responses to CSR Tradeoffs: When Other-Oriented and Trust Trump Material Self-Interest. *Frontiers in Psychology*, 6.
- Brown, T. J., & Dacin, P. A. (1997). The Company and the Product: Corporate Associations and Consumer Product Responses. *Journal of Marketing*, 61(1), 68.
- Buzby, J. C., & Hyman, J. (2012). Total and per capita value of food loss in the United States. *Food Policy*, 37(5), 561–570.

- Campo, K., Gijsbrechts, E., & Nisol, P. (2000). Towards understanding consumer response to stock-outs. *Journal of Retailing*, 76(2), 219–242.
- Carroll, A. B. (1979). A Three-Dimensional Conceptual Model of Corporate Performance. *The Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Carroll, A. B. (1999). Corporate Social Responsibility: Evolution of a Definitional Construct. *Business & Society*, 38(3), 268–295.
- Carroll, A. B., & Shabana, K. M. (2010). The Business Case for Corporate Social Responsibility: A Review of Concepts, Research and Practice. *International Journal of Management Reviews*, 12(1), 85–105.
- Carvalho, S. W., Sen, S., de Oliveira Mota, M., & de Lima, R. C. (2010). Consumer Reactions to CSR: A Brazilian Perspective. *Journal of Business Ethics*, 91(S2), 291–310.
- Choi, S., & Ng, A. (2011). Environmental and Economic Dimensions of Sustainability and Price Effects on Consumer Responses. *Journal of Business Ethics*, 104(2), 269–282.
- Chung, K.-H., Yu, J.-E., Choi, M.-G., & Shin, J.-I. (2015a). The Effects of CSR on Customer Satisfaction and Loyalty in China: The Moderating Role of Corporate Image. *Journal of Economics, Business and Management*, 3(5), 542–547.
- Chung, K.-H., Yu, J.-E., Choi, M.-G., & Shin, J.-I. (2015b). The Effects of CSR on Customer Satisfaction and Loyalty in China: The Moderating Role of Corporate Image. *Journal of Economics, Business and Management*, 3(5), 542–547.
- Cicatiello, C., Franco, S., Pancino, B., & Blasi, E. (2016). The value of food waste: An exploratory study on retailing. *Journal of Retailing and Consumer Services*, 30, 96–104.
- Clarkson, M. B. E. (1995). A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance. *The Academy of Management Review*, 20(1), 92–117.
- Connors, S., Anderson-MacDonald, S., & Thomson, M. (2017). Overcoming the ‘Window Dressing’ Effect: Mitigating the Negative Effects of Inherent Skepticism Towards Corporate Social Responsibility. *Journal of Business Ethics*, 145(3), 599–

621. https://ideas.repec.org/a/kap/jbuset/v145y2017i3d10.1007_s10551-015-2858-z.html, accessed: 07.04.2021

Corsten, D., & Gruen, T. (2003). Desperately seeking shelf availability: An examination of the extent, the causes, and the efforts to address retail out-of-stocks. *International Journal of Retail & Distribution Management*, 31(12), 605–617.

Currás-Pérez, R., Dolz-Dolz, C., Miquel-Romero, M. J., & Sánchez-García, I. (2018). How social, environmental, and economic CSR affects consumer-perceived value: Does perceived consumer effectiveness make a difference? *Corporate Social Responsibility and Environmental Management*, 25(5), 733–747.

Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1–13.

Dawkins, J., & Lewis, S. (2003). CSR in Stakeholder Expectations: And Their Implication for Company Strategy. *Journal of Business Ethics*, 44(2), 185–193.

Day, E., & Crask, M. (2000). Value Assessment: The Antecedent of Customer Satisfaction. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behaviour*, 13, 42–50.

Del Giudice, T., La Barbera, F., Vecchio, R., & Verneau, F. (2016). Anti-Waste Labeling and Consumer Willingness to Pay. *Journal of International Food & Agribusiness Marketing*, 28(2), 149–163.

Devin, B., & Richards, C. (2018). Food Waste, Power, and Corporate Social Responsibility in the Australian Food Supply Chain. *Journal of Business Ethics*, 150(1), 199–210.

Du, S., Bhattacharya, C. B., & Sen, S. (2011). Corporate Social Responsibility and Competitive Advantage: Overcoming the Trust Barrier. *Management Science*, 57(9), 1528–1545.

Du, S., Bhattacharya, C., & Sen, S. (2007). Reaping relational rewards from corporate social responsibility: The role of competitive positioning. *International Journal of Research in Marketing*, 24, 224–241.

Echambadi, R., & Hess, J. D. (2007). Mean-Centering Does Not Alleviate Collinearity Problems in Moderated Multiple Regression Models. *Marketing Science*, 26(3), 438–

445.

ECR Europe. (2003). *ECR: Optimal shelf availability increasing shopper satisfaction at the moment of truth* (Brussels). ECR Europe.

Egri, C. P., & Ralston, D. A. (2004). Generation Cohorts and Personal Values: A Comparison of China and the United States. *Organization Science*, 15(2), 210–220. <https://ideas.repec.org/a/inm/ororsc/v15y2004i2p210-220.html>, accessed: 07.04.2021

Ehrental, J. C. F., Gruen, T. W., & Hofstetter, J. S. (2014). Value attenuation and retail out-of-stocks: A service-dominant logic perspective. *International Journal of Physical Distribution & Logistics Management*, 44(1/2), 39–57.

Einwiller, S., Fedorikhin, A., Johnson, A., & Kamins, M. (2006). Enough Is Enough! When Identification No Longer Prevents Negative Corporate Associations. *Journal of The Academy of Marketing Science - J ACAD MARK SCI*, 34, 185–194.

El-garaihy, W. H., Mobarak, A. M., & Albahussain, S. A. (2014). *Measuring the Impact of Corporate Social Responsibility Practices on Competitive Advantage: A Mediation Role of Reputation and Customer Satisfaction*.

Elving, W. J. L. (2010). *CSR and skepticism: The influence of fit and reputation on skepticism towards CSR communications*. <https://dare.uva.nl/search?identifier=aa7003ba-a475-4483-916a-944e79f650bc>, accessed: 07.04.2021

Emmelhainz, M. A., Stock, J. R., & Emmelhainz, L. W. (1991). Consumer responses to retail stock-outs. *Journal of Retailing*, 67(2), 138-147.

Eriksson, M., Ghosh, R., Mattsson, L., & Ismatov, A. (2017). Take-back agreements in the perspective of food waste generation at the supplier-retailer interface. *Resources, Conservation and Recycling*, 122, 83–93.

Eroglu, S. (1987). The Scenario Method: A Theoretical, Not Theatrical, Approach. *AMA Summer Marketing Educators' Conference Proceedings*, 236.

European Commission. (2011a). *Communication from the Commission of the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A renewed EU strategy 2011-14 for Corporate Social Responsibility*. https://ec.europa.eu/growth/content/corporate-social-responsibility-new-definition-new-agenda-action-0_de, accessed: 07.04.2021

- European Commission. (2011b). *Preparatory study on food waste across EU 27: Final report*. Publications Office. <https://data.europa.eu/doi/10.2779/85947>, accessed: 07.04.2021
- European Commission. (2012). *Preparing a Waste Prevention Programme*. <https://ec.europa.eu/environment/waste/prevention/pdf/Waste%20prevention%20guidelines.pdf>, accessed: 07.04.2021
- FAO (Ed.). (2006). *Eradicating world hunger: Taking stock ten years after the World Food Summit*. FAO.
- FAO. (2011). *Global food losses and food waste: Extent, causes and prevention ; study conducted for the International Congress Save Food! at Interpack 2011, [16 - 17 May], Düsseldorf, Germany*. Food and Agriculture Organization of the United Nations.
- FAO. (2013). *Food wastage footprint: Impacts on natural resources: summary report*. FAO.
- Fatma, M., Khan, I., & Rahman, Z. (2016). The effect of CSR on consumer behavioral responses after service failure and recovery. *European Business Review*, 28(5), 583–599.
- Fernández, R., Bonillo, M., & Holbrook, M. B. (2008). The Conceptualization and Measurement of Consumer Value in Services. *International Journal of Market Research - INT J MARKET RES*, 51.
- Filimonau, V., & Gherbin, A. (2017). An exploratory study of food waste management practices in the UK grocery retail sector. *Journal of Cleaner Production*, 167, 1184–1194.
- Fitzsimons, G. J. (2000). Consumer Response to Stockouts. *Journal of Consumer Research*, 27(2), 249–266.
- Foreh, M. R., & Grier, S. (2003). When Is Honesty the Best Policy? The Effect of Stated Company Intent on Consumer Skepticism. *Journal of Consumer Psychology*, 13(3), 349–356.
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American Customer Satisfaction Index: Nature, Purpose, and Findings. *Journal of Marketing*, 60(4), 7–18.
- Forsman-Hugg, S., Katajajuuri, J., Riipi, I., Mäkelä, J., Järvelä, K., & Timonen, P.

- (2013). Key CSR dimensions for the food chain. *British Food Journal*, 115(1), 30–47.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing Moderator and Mediator Effects in Counseling Psychology Research. *Journal of Counseling Psychology*, 51(1), 115–134.
- Furman, A., Maison, D., & Sekścińska, K. (2020). Segmentation Based on Attitudes Toward Corporate Social Responsibility in Relation to Demographical Variables and Personal Values – Quantitative and Qualitative Study of Polish Consumers. *Frontiers in Psychology*, 11, 450.
- Garriga, E., & Melé, D. (2004). Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics*, 53(1/2), 51–71.
- Genier, C., Stamp, M., & Pfitzer, M. (2009). Corporate social responsibility for agro-industries development. *Agro-Industries for Development*, 223–251.
- Godfray, H. C. J., Beddington, J. R., Crute, I. R., Haddad, L., Lawrence, D., Muir, J. F., Pretty, J., Robinson, S., Thomas, S. M., & Toulmin, C. (2010). Food Security: The Challenge of Feeding 9 Billion People. *Science*, 327(5967), 812–818.
- Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. *Strategic Management Journal*, 30(4), 425–445.
- Goebel, P., Reuter, C., Pibernik, R., Sichtmann, C., & Bals, L. (2018). Purchasing managers' willingness to pay for attributes that constitute sustainability. *Journal of Operations Management*, S0272696318300652.
- Golob, U., Podnar, K., Koklič, M. K., & Zabkar, V. (2019). The importance of corporate social responsibility for responsible consumption: Exploring moral motivations of consumers. *Corporate Social-Responsibility and Environmental Management*, 26(2), 416–423.
- González-Rodríguez, M. R., Díaz-Fernández, M. C., & Biagio, S. (2019). The perception of socially and environmentally responsible practices based on values and cultural environment from a customer perspective. *Journal of Cleaner Production*, 216, 88–98.
- Gounaris, S. P., Tzempelikos, N. A., & Chatzipanagiotou, K. (2007). The Relationships of Customer-Perceived Value, Satisfaction, Loyalty and Behavioral Intentions. *Journal*

of Relationship Marketing (Binghamton, N.Y.), 6(1), 63–87.

Green, T., & Peloza, J. (2011). How does corporate social responsibility create value for consumers? *Journal of Consumer Marketing*, 28(1), 48–56.

Greenberg, J. (1987). The College Sophomore as Guinea Pig: Setting the Record Straight. *Academy of Management Review*, 12(1), 157–159.

Gruber, V., Holweg, C., & Teller, C. (2016a). What a Waste! Exploring the Human Reality of Food Waste from the Store Manager's Perspective. *Journal of Public Policy & Marketing*, 35(1), 3–25.

Gruber, V., Holweg, C., & Teller, C. (2016b). An Examination of Food Waste as a Corporate Social Responsibility of the Retail and Wholesale Sector. In L. Petruzzellis & R. S. Winer (Eds.), *Rediscovering the Essentiality of Marketing* (pp. 411–411). Springer International Publishing.

Grubor, A., Milicevic, N., & Djokic, N. (2017). The impact of store satisfaction on consumer responses in out-of-stock situations. *Review of Business Management*, 520–537.

Gruen, T. W., Corsten, D. S., & Bharadwaj, S. (2002). *Retail Out-of-Stocks: A Worldwide Examination of Extend, Causes and Consumer Responses*. Grocery Manufacturers of America. http://itsoutofstock.com/wp-content/uploads/2013/04/GMA_2002_-Worldwide_OOS_Study.pdf, accessed: 07.04.2021

Gruen, T. W., Corsten, D. S., & Grocery Manufacturers of America. (2007). *A comprehensive guide to retail out-of-stock reduction in the fast-moving consumer goods industry*. Grocery Manufacturers of America.

Gustavsson, J., Cederberg, C., & Sonesson, U. (2011, May 16). *Global Food Losses and Food Waste*. Save Food Congress, Düsseldorf. https://www.madr.ro/docs/ind-alimentara/risipa_alimentara/presentation_food_waste.pdf, accessed: 07.04.2021

Hahn, A., Behle, B., Lischewski, D., & Rein, W. (2017). Destillieren und Rektifizieren. In *Produktionstechnische Praxis* (pp. 235–252). Wiley-VCH Verlag GmbH & Co. KGaA.

Hair, J. F. (Ed.). (2007). *Research methods for business*. Wiley.

Hall, K. D., Guo, J., Dore, M., & Chow, C. C. (2009). The Progressive Increase of Food

- Waste in America and Its Environmental Impact. *PLoS ONE*, 4(11), e7940.
- Ham, C.-D., & Kim, J. (2020). The effects of CSR communication in corporate crises: Examining the role of dispositional and situational CSR skepticism in context. *Public Relations Review*, 46(2), 101792.
- Hansen, H., Samuelsen, B. M., & Silseth, P. R. (2008). Customer perceived value in B-t-B service relationships: Investigating the importance of corporate reputation. *Industrial Marketing Management*, 37(2), 206–217.
- Hartmann, M. (2011). Corporate social responsibility in the food sector. *European Review of Agricultural Economics*, 38(3), 297–324.
- Helm, R., Hegenbart, T., & Endres, H. (2013). Explaining costumer reactions to real stockouts. *Review of Managerial Science*, 7(3), 223–246.
- Henderson, T., & Arora, N. (2010). Promoting Brands across Categories with a Social Cause: Implementing Effective Embedded Premium Programs. *Journal of Marketing*, 74(6), 41–60.
- Holbrook, M. B. (2006). ROSEPEKICECIVECI versus CCV. In R. F. Lusch (Ed.), *The service-dominant logic of marketing: Dialog, debate and directions* (pp. 208–221). Sharpe.
- Holbrook, M. B. (2019, November 21). *The Concept of Consumer Value: Development, Implications, Trajectory*. Value in Marketing; Routledge.
- Holman, L. & G Buzek. (2008). *What's the deal with out-of-stocks?* (Franklin). IHL Group.
- Huang, C.-H., Liu, S.-M., & Hsu, N.-Y. (2020). Understanding Global Food Surplus and Food Waste to Tackle Economic and Environmental Sustainability. *Sustainability*, 12(7), 2892.
- Hunt, S. D., & Vitell, S. (1986). A General Theory of Marketing Ethics. *Journal of Macromarketing*, 6(1), 5–16.
- Institution of Mechanical Engineers-IME. (2013). *Global Food Waste: Not, Want Not*. <https://www.imeche.org/policy-and-press/reports/detail/global-food-waste-not-want-not>, accessed: 07.04.2021
- Ipsos MORI. (2000). *The First Ever European Survey of Consumer's Attitudes toward Corporate Social Responsibility: Research for CSR Europe*.

- Irshad, A., Rahim, A., Khan, M. F., & Khan, M. M. (2017). *THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON CUSTOMER SATISFACTION AND CUSTOMER LOYALTY, MODERATING EFFECT OF CORPORATE IMAGE (EVIDENCE FROM PAKISTAN)*. 11.
- Isa, S. M., Chin, P. N., & Liew, I. (2019). Exploring the role of corporate social responsibility skepticism in ethical purchase intention. *Social Responsibility Journal*, 16(2), 291–307.
- Jiang, W., & Wong, J. K. W. (2016). Key activity areas of corporate social responsibility (CSR) in the construction industry: A study of China. *Journal of Cleaner Production*, 113, 850–860.
- Joireman, J., Smith, D., Liu, R. L., & Arthurs, J. (2015). It's All Good: Corporate Social Responsibility Reduces Negative and Promotes Positive Responses to Service Failures among Value-Aligned Customers. *Journal of Public Policy & Marketing*, 34(1), 32–49.
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2009). Trust and Satisfaction, Two Stepping Stones for Successful E-Commerce Relationships: A Longitudinal Exploration. *Information Systems Research*, 20(2), 237–257.
- Kim, H.-S., & Lee, S. Y. (2015). Testing the Buffering and Boomerang Effects of CSR Practices on Consumers' Perception of a Corporation during a Crisis. *Corporate Reputation Review*, 18(4), 277–293.
- Kim, J., & Park, T. (2020). How corporate social responsibility (CSR) saves a company: The role of gratitude in buffering vindictive consumer behavior from product failures. *Journal of Business Research*, 117, 461–472.
- Kim, Y. (2017). Consumer Responses to the Food Industry's Proactive and Passive Environmental CSR, Factoring in Price as CSR Tradeoff. *Journal of Business Ethics*, 140(2), 307–321.
- Klein, J., & Dawar, N. (2004). Corporate social responsibility and consumers' attributions and brand evaluations in a product–harm crisis. *International Journal of Research in Marketing*, 21(3), 203–217.
- Krishna, A., & Rajan, U. (2009). Cause Marketing: Spillover Effects of Cause-Related Products in a Product Portfolio. *Management Science*, 55(9), 1469–1485.

- Kromrey, J. D., & Foster-Johnson, L. (1998). Mean Centering in Moderated Multiple Regression: Much Ado about Nothing. *Educational and Psychological Measurement*, 58(1), 42–67.
- Kulikovskaja, V., & Aschemann-Witzel, J. (2017). Food Waste Avoidance Actions in Food Retailing: The Case of Denmark. *Journal of International Food & Agribusiness Marketing*, 29(4), 328–345.
- Ladhari, R., & Tchetgna, N. M. (2015). The influence of personal values on Fair Trade consumption. *Journal of Cleaner Production*, 87, 469–477.
- Lanfranchi, M., Giannetto, C., & De Pascale, A. (2014). ANALYSIS AND MODELS FOR THE REDUCTION OF FOOD WASTE IN ORGANIZED LARGE-SCALE RETAIL DISTRIBUTION IN EASTERN SICILY. *American Journal of Applied Sciences*, 11(10), 1860–1874.
- Lapierre, Jozée. (2000). Customer-perceived value in industrial contexts. *Journal of Business & Industrial Marketing*, 15(2/3), 122–145.
- Lapierre, Jozee, Filiatrault, P., & Chebat, J.-C. (1999). Value Strategy Rather Than Quality Strategy: A Case of Business-to-Business Professional Services. *Journal of Business Research*, 45(2), 235–246.
- Lebersorger, S., & Schneider, F. (2014). Food loss rates at the food retail, influencing factors and reasons as a basis for waste prevention measures. *Waste Management*, 34(11), 1911–1919.
- Lee, C.-K., Yoon, Y.-S., & Lee, S.-K. (2007). Investigating the relationships among perceived value, satisfaction, and recommendations: The case of the Korean DMZ. *Tourism Management*, 28(1), 204–214.
- Lee, J.-S., Lee, C.-K., & Choi, Y. (2011). Examining the Role of Emotional and Functional Values in Festival Evaluation. *Journal of Travel Research*, 50(6), 685–696.
- Leonidou, C. N., & Skarmetas, D. (2017). Gray Shades of Green: Causes and Consequences of Green Skepticism. *Journal of Business Ethics*, 144(2), 401–415.
- Lerro, M., Caracciolo, F., Vecchio, R., & Cembalo, L. (2018). Consumer's Side of Corporate Social Responsibility: A Nonhypothetical Study: Consumer's Side of Corporate Social Responsibility: A Nonhypothetical Study. *Journal of Consumer Affairs*, 52(3), 689–710.

- Li, J., He, H., Liu, H., & Su, C. (2017). Consumer Responses to Corporate Environmental Actions in China: An Environmental Legitimacy Perspective. *Journal of Business Ethics*, 143(3), 589–602.
- Little, T. D., Card, N. A., Bovaird, J. A., Preacher, K. J., & Crandall, C. S. (2007). Structural equation modeling of mediation and moderation with contextual factors. In *Modeling contextual effects in longitudinal studies* (pp. 207–230). Lawrence Erlbaum Associates Publishers.
- Loureiro, S. M. C., Dias Sardinha, I. M., & Reijnders, L. (2012). The effect of corporate social responsibility on consumer satisfaction and perceived value: The case of the automobile industry sector in Portugal. *Journal of Cleaner Production*, 37, 172–178.
- Luo, X., & Bhattacharya, C. B. (2006). Corporate Social Responsibility, Customer Satisfaction, and Market Value. *Journal of Marketing*, 70(4), 1–18.
- Maignan, I. (2001). Consumers' Perceptions of Corporate Social Responsibilities: A Cross-Cultural Comparison. *Journal of Business Ethics*, 30(1), 57–72.
- McKinsey&Company. (2006). *Global Survey of Business Executives*. The McKinsey Quarterly.
- Messner, R., Johnson, H., & Richards, C. (2021). From surplus-to-waste: A study of systemic overproduction, surplus and food waste in horticultural supply chains. *Journal of Cleaner Production*, 278, 123952.
- Mizik, N., & Jacobson, R. (2003). Trading off between Value Creation and Value Appropriation: The Financial Implications of Shifts in Strategic Emphasis. *Journal of Marketing*, 67(1), 63–76.
- Mohammed, A., & Al-Swidi, A. (2019). The influence of CSR on perceived value, social media and loyalty in the hotel industry. *Spanish Journal of Marketing - ESIC*, 23(3), 373–396.
- Mohr, L. A., Eroğlu, D., & Ellen, P. S. (1998). The Development and Testing of a Measure of Skepticism Toward Environmental Claims in Marketers' Communications. *Journal of Consumer Affairs*, 32(1), 30–55.
- Mohr, L. A., & Webb, D. J. (2005). The effects of corporate social responsibility and price on consumer responses. *Journal of Consumer Affairs*, 39(1), 121–147.
- Moorthy, R., Behera, S., & Verma, S. (2015). On-Shelf Availability in Retailing.

International Journal of Computer Applications, 115(23), 47–51.

Mourad, M. (2016). Recycling, recovering and preventing “food waste”: Competing solutions for food systems sustainability in the United States and France. *Journal of Cleaner Production*, 126, 461–477.

Murray, K. B., & Vogel, C. M. (1997). Using a hierarchy-of-effects approach to gauge the effectiveness of corporate social responsibility to generate goodwill toward the firm: Financial versus nonfinancial impacts. *Journal of Business Research*, 38(2), 141–159.

Muth, M. K., Birney, C., Cuéllar, A., Finn, S. M., Freeman, M., Galloway, J. N., Gee, I., Gephart, J., Jones, K., Low, L., Meyer, E., Read, Q., Smith, T., Weitz, K., & Zoubek, S. (2019). A systems approach to assessing environmental and economic effects of food loss and waste interventions in the United States. *Science of The Total Environment*, 685, 1240–1254.

Nordic Council of Ministers. (2011). *Initiatives on prevention of food waste in the retail and wholesale trades*. Nordic Council of Ministers,.

Obermiller, C., Spangenberg, E., & MacLachlan, D. L. (2005). AD SKEPTICISM: The Consequences of Disbelief. *Journal of Advertising*, 34(3), 7–17.

Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, 17(4), 460–469.

Oliver, R. L. (1996). Varieties of Value in the Consumption Satisfaction Response. *ACR North American Advances*, NA-23. <https://www.acrwebsite.org/volumes/7930/volumes/v23/NA-23/full>, accessed: 07.04.2021

Papakiriakopoulos, D. A. (2006). *Automatic Detection of Out of Shelf Products in the Retail Sector Supply Chain*. Athens University of Economics and Business.

Parfitt, J., Barthel, M., & Macnaughton, S. (2010). Food waste within food supply chains: Quantification and potential for change to 2050. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 365(1554), 3065–3081.

Park, E., Kim, K. J., & Kwon, S. J. (2017). Corporate social responsibility as a determinant of consumer loyalty: An examination of ethical standard, satisfaction, and trust. *Journal of Business Research*, 76, 8–13.

Patel, J. D., Gadhavi, D. D., & Shukla, Y. S. (2017). Consumers’ responses to cause

- related marketing: Moderating influence of cause involvement and skepticism on attitude and purchase intention. *International Review on Public and Nonprofit Marketing*, 14(1), 1–18.
- Peloza, J., & Shang, J. (2011). How can corporate social responsibility activities create value for stakeholders? A systematic review. *Journal of the Academy of Marketing Science*, 39(1), 117–135.
- Pérez, A., & del Bosque, I. R. (2012). The Role of CSR in the Corporate Identity of Banking Service Providers. *Journal of Business Ethics*, 108(2), 145–166.
- Pérez, A., del Mar García de los Salmones, M., & Rodríguez del Bosque, I. (2013). The effect of corporate associations on consumer behavior. *European Journal of Marketing*, 47(1/2), 218–238.
- Pizzi, G., & Scarpi, D. (2013). When Out-of-Stock Products DO Backfire: Managing Disclosure Time and Justification Wording. *Journal of Retailing*, 89(3), 352–359.
- Priefer, C., Jörissen, J., & Bräutigam, K.-R. (2016). Food waste prevention in Europe – A cause-driven approach to identify the most relevant leverage points for action. *Resources, Conservation and Recycling*, 109, 155–165.
- Progressive Grocer. (1968). *The out of stock study, Part 2*. 17–32.
- Pulker, C. E., Trapp, G. S. A., Scott, J. A., & Pollard, C. M. (2018). Global supermarkets' corporate social responsibility commitments to public health: A content analysis. *Globalization and Health*, 14(1), 121.
- Ramasamy, S., Dara Singh, K. S., Amran, A., & Nejati, M. (2020). Linking human values to consumer CSR perception: The moderating role of consumer skepticism. *Corporate Social Responsibility and Environmental Management*, 27(4), 1958–1971.
- Richter, B., & Bokelmann, W. (2018). The significance of avoiding household food waste – A means-end-chain approach. *Waste Management (Elmsford)*, 74, 34–42.
- Rim, H., & Kim, S. (2016). Dimensions of corporate social responsibility (CSR) skepticism and their impacts on public evaluations toward CSR. *Journal of Public Relations Research*, 28(5–6), 248–267.
- Rivera, J. J., Bigne, E., & Curras-Perez, R. (2016). Effects of Corporate Social Responsibility perception on consumer satisfaction with the brand. *Spanish Journal of Marketing - ESIC*, 20(2), 104–114.

- Romani, S., Grappi, S., & Bagozzi, R. P. (2013). Explaining Consumer Reactions to Corporate Social Responsibility: The Role of Gratitude and Altruistic Values. *Journal of Business Ethics*, 114(2), 193–206.
- Sampaio, E. Q. D., & Sampaio, M. (2015). Managerial response to stockouts: The effect of remedies on consumer behavior. *Production*, 26(1), 66–77.
- Sánchez-Fernández, R., & Iniesta-Bonillo, M. Á. (2007). The concept of perceived value: A systematic review of the research. *Marketing Theory*, 7(4), 427–451.
- Sanchez-Ruiz, L., Blanco, B., & Kyguolienė, A. (2018). A Theoretical Overview of the Stockout Problem in Retail: From Causes to Consequences. *Management of Organizations: Systematic Research*, 79(1), 103–116.
- Schary, P. B., & Christopher, M. (1979). The anatomy of a stock-out. *Journal of Retailing*, 55(2), 59–70.
- Schneider, A. (2015). Reifegradmodell CSR – eine Begriffsklärung und -abgrenzung. In A. Schneider & R. Schmidpeter (Eds.), *Corporate Social Responsibility: Verantwortungsvolle Unternehmensführung in Theorie und Praxis* (pp. 21–42). Springer.
- Schwartz, S. (1992). Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries. In *Advances in Experimental Social Psychology* (Vol. 25, pp. 1–65). Elsevier.
- Schwartz, S. (1994). Are There Universal Aspects in the Structure and Contents of Human Values? *Journal of Social Issues*, 50(4), 19–45.
- Schwartz, S. (2003). A proposal for measuring value orientations across nations. *Questionnaire Package of ESS*, 259–290.
- Sen, S., & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. (Statistical Data Included). *Journal of Marketing Research*, 38(2), 225–243.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159–170.
- Shin, Y., & Thai, V. V. (2015). The Impact of Corporate Social Responsibility on Customer Satisfaction, Relationship Maintenance and Loyalty in the Shipping Industry. *Corporate Social-Responsibility and Environmental Management*, 22(6), 381–392.

- Siu, N. Y.-M., Zhang, T. J.-F., & Kwan, H.-Y. (2014). Effect of corporate social responsibility, customer attribution and prior expectation on post-recovery satisfaction. *International Journal of Hospitality Management*, 43, 87–97.
- Skarmeas, D., & Leonidou, C. N. (2013). When consumers doubt, Watch out! The role of CSR skepticism. *Journal of Business Research*, 66(10), 1831–1838.
- Slack, N., Singh, G., & Sharma, S. (2020). Impact of perceived value on the satisfaction of supermarket customers: Developing country perspective. *International Journal of Retail & Distribution Management*, 48(11), 1235–1254.
- Slaper, T. F., & Hall, T. J. (2011). The triple bottom line: What is it and how does it work? *Indiana Business Review*, 86(1), 4–8.
- Slater, S. F. (1997). Developing a customer value-based theory of the firm. *Journal of the Academy of Marketing Science*, 25(2), 162–167.
- Smil, V. (2004). Improving Efficiency and Reducing Waste in Our Food System. *Environmental Sciences*, 1(1), 17–26.
- Smith, J. (2013). *The Companies with the Best CSR Reputations*. Forbes. <https://www.forbes.com/sites/jacquelynsmith/2013/10/02/the-companies-with-the-best-csr-reputations-2/>, accessed: 07.04.2021
- Smith, N. C. (1996). Ethics and the Typology of Customer Value. *ACR North American Advances*, NA-23. <https://www.acrwebsite.org/volumes/7931/volumes/v23/NA-23/full>, accessed: 07.04.2021
- Springer, J. (2006). Whole foods posts 22% sales growth. *Supermarket News*, 54(7), 8.
- Statista. (2020). *Coronavirus: Out of stock rate at selected retailers U.S. 2020*. Statista. <https://www.statista.com/statistics/1109017/coronavirus-out-of-stock-rate-at-selected-retailers-us/>, accessed 07.04.2021
- Staudt, S., Shao, C., Dubinsky, A., & Wilson. (2014). Corporate Social Responsibility, Perceived Customer Value, and Customer-Based Brand Equity: A Cross-National Comparison. *Journal of Strategic Innovation and Sustainability*, 10(1), 65–87.
- Steenhaut, S., & van Kenhove, P. (2006). 'An Empirical Investigation of the Relationships among a Consumer's Personal Values, Ethical Ideology and Ethical Beliefs.' *Journal of Business Ethics*, 64(2), 137–155.

- Steenkamp, J.-B. E. M., ter Hofstede, F., & Wedel, M. (1999). A Cross-National Investigation into the Individual and National Cultural Antecedents of Consumer Innovativeness. *Journal of Marketing*, 63(2), 55–69.
- Steinhoff, L. (2014). *Loyalitätswirkung des geschenkten bevorzugten Kundenstatus: Eine theoretische und empirisch-experimentelle Analyse*. Springer Fachmedien Wiesbaden.
- Stenmarck, Å., Jensen, C., Quested, T., Moates, G., Buksti, M., Cseh, B., Juul, S., Parry, A., Politano, A., Redlingshofer, B., Scherhauser, S., Silvennoinen, K., Soethoudt, H., Zübert, C., & Östergren, K. (2016). *Estimates of European food waste levels*. <http://edepot.wur.nl/378674>, accessed: 07.04.2021
- Stern, P. C. (2000). New Environmental Theories: Toward a Coherent Theory of Environmentally Significant Behavior. *Journal of Social Issues*, 56(3), 407–424.
- Strahilevitz, M. (1999). The Effects of Product Type and Donation Magnitude on Willingness to Pay More for a Charity-Linked Brand. *Journal of Consumer Psychology*, 8(3), 215–241.
- Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203–220.
- Taylor, J. C., & Fawcett, S. E. (2001). RETAIL ON-SHELF PERFORMANCE OF ADVERTISED ITEMS: AN ASSESSMENT OF SUPPLY CHAIN EFFECTIVENESS AT THE POINT OF PURCHASE. *Journal of Business Logistics*, 22(1), 73–89.
- Trudel, R., & Cotte, J. (2009). Does it pay to be good? *MIT Sloan Management Review*, 50(2), 60–69.
- Tsiros, M., Mittal, V., & Jr, W. (2004). The Role of Attributions in Customer Satisfaction: A Reexamination. *Journal of Consumer Research*, 31, 476–483.
- UN. (2015). *Sustainable Developments Goals. Goal 12: Ensure Sustainable Consumption and Production Patterns*. <http://www.un.org/sustainabledevelopment/sustainable-consumption-production/>., accessed 07.04.2021
- Unanue, W., Vignoles, V. L., Dittmar, H., & Vansteenkiste, M. (2016). Life goals predict environmental behavior: Cross-cultural and longitudinal evidence. *Journal of Environmental Psychology*, 46, 10–22.
- United Nations. (1987). *Report of the World Commission on Environment and*

- Development. Our Common Future.*
 file:///Users/sofiagalli/Downloads/our_common_futurebrundtlandreport1987.pdf,
 accessed 07.04.2021
- USEPA. (2020). *Sustainable Management of Food*. <https://www.epa.gov/sustainable-management-food>, accessed: 07.04.2021
- Vahdati, H., Mousavi, N., & Tajik, Z. M. (2015). *The Study of Consumer Perception on Corporate Social Responsibility towards Consumers Attitude and Purchase Behavior*.
- Verbeke, W., Farris, P., & Thurik, R. (1998). Consumer response to the preferred brand out-of-stock situation. *European Journal of Marketing*, 32(11/12), 1008–1028.
- Verhoef, P. C., & Sloot, L. M. (2010). Out-of-Stock: Reactions, Antecedents, Management Solutions, and a Future Perspective. In M. Krafft & M. K. Mantrala (Eds.), *Retailing in the 21st Century* (pp. 285–299). Springer Berlin Heidelberg.
- Vitell, S. (2015). A Case for Consumer Social Responsibility (CnSR): Including a Selected Review of Consumer Ethics/Social Responsibility Research. *Journal of Business Ethics*, 130(4), 767–774.
- Vosgerau, J., & Gatignon, H. (2007). Mean-Centering and the Interpretation of Anova and Moderated Regression. *ACR North American Advances*, NA-34. <https://www.acrwebsite.org/volumes/12564/volumes/v34/NA-34>, accessed: 07.04.2021
- Wagner, P., & Hering, L. (2014). Online-Befragung. In N. Baur & J. Blasius (Eds.), *Handbuch Methoden der empirischen Sozialforschung* (pp. 661–673). Springer Fachmedien Wiesbaden.
- Walsh, G., & Bartikowski, B. (2013). Exploring corporate ability and social responsibility associations as antecedents of customer satisfaction cross-culturally. *Journal of Business Research*, 66(8), 989–995.
- Walter, C. K., & Grabner, J. R. (1975). Stockout Cost Models: Empirical Tests in a Retail Situation. *Journal of Marketing*, 39(3), 56.
- West, S. G., Aiken, L. S., & Krull, J. L. (1996). Experimental personality designs: Analyzing categorical by continuous variable interactions. *Journal of Personality*, 1–48.
- Wiebach, N., & Diels, J. (2011). *The impact of context and promotion on consumer*

responses and preferences in out-of-stock situations.

Willersinn, C., Mack, G., Mouron, P., Keiser, A., & Siegrist, M. (2015). Quantity and quality of food losses along the Swiss potato supply chain: Stepwise investigation and the influence of quality standards on losses. *Waste Management*, 46, 120–132.

Williams, A., & Soutar, G. (2009). Value, satisfaction and behavioral intentions in an adventure tourism context. *Annals of Tourism Research*, 36, 413–438.

Wilson, M. S. (2005). A Social-Value Analysis of Postmaterialism. *The Journal of Social Psychology*, 145(2), 209–224.

Woodruff, R. B. (1997). Customer value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139.

WRAP. (2009). *Household food and drink waste in the UK: Final report*. Wastes & Resources Action Programme (WRAP). http://www.wrap.org.uk/downloads/Household_food_and_drink_waste_in_the_UK_-_report.8438d59b.8048.pdf, accessed: 07.04.2021

Yang, Z., & Peterson, R. T. (2004). Customer perceived value, satisfaction, and loyalty: The role of switching costs. *Psychology and Marketing*, 21(10), 799–822.

Zasuwa, G. (2016). Do the ends justify the means? How altruistic values moderate consumer responses to corporate social initiatives. *Journal of Business Research*, 69(9), 3714–3719.

Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), 2–22.

Zinn, W., & Liu, P. C. (2001). CONSUMER RESPONSE TO RETAIL STOCKOUTS. *Journal of Business Logistics*, 22(1), 49–71.

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Appendix A. Scenario

SCENARIO I (general)

It's 6 p.m. and you enter your typical grocery store. After checking your shopping list, you start searching for the products you need. While looking for one of the products on your list, you find an empty shelf. You then seek out a supermarket employee, who informs you that the product you want is not in stock. Furthermore, he apologizes for the inconvenience.

SCENARIO II (CSR / FOOD WASTE)

It's 6 p.m. and you enter your typical grocery store. After checking your shopping list, you start searching for the products you need. While looking for one of the products on your list, you find an empty shelf. You then seek out a supermarket employee, who tells you that the product you want is not in stock. He goes on to explain that the supermarket has launched a new Corporate Social Responsibility* initiative, buying a smaller quantity of the products to avoid wasting food.

*Corporate Social Responsibility is the social responsibility of companies in the sense of sustainable business management

Appendix B. Pre-Test Questionnaire

Dear Participant,

this survey is being conducted as part of my master's thesis at the University of Vienna. Your participation will help me a lot! The aim of the survey is to investigate your perception of the following scenario. This survey is for scientific use only and will not be disclosed for commercial interests.

Any information you provide will be used anonymously - you will not disclose any personal information, and we will not be able to track any personal information. In total, this will take about 5 to 10 minutes of your time.

Please read the following carefully:

It is important that you read the questions carefully and follow the instructions exactly.

There is no wrong or right answer, we just want to hear your opinion.

Most questions ask you to indicate the level of your agreement (low/high) with a particular statement. Please select the number 7 if you fully agree with a statement and the number 1 if you strongly disagree with a statement. You may also choose a number between 1 and 7.

There is no time limit for this questionnaire. Please take your time to complete it.

Thank you for your participation and your time!

In the following step, you will be presented with a scenario. Please try to imagine yourself in the situation described.								
Scenario 1 or Scenario 2 is presented.								
1. A situation like the one described above can also occur in real life.								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
2. The situation described seems realistic to me.								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
3. The supermarket seems socially responsible to me.								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
4. The supermarket takes responsibility and acts socially.								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
5. I classify the initiative of the supermarket as socially responsible. (only for scenario 2)								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
6. A supermarket with such an initiative takes responsibility and acts socially. (only for scenario 2)								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
7. The supermarket's initiative helps to combat food waste. (only for scenario 2)								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
8. The supermarket's initiative will help reduce food waste. only for scenario 2)								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
At the end please fill in some demographic data for statistical purpose.								
Please state your gender:								
☐ Female			☐ Male			☐ Divers		
Please specify your place of residence:								
☐ Germany			☐ Austria					
Please state your age:								

Please state your monthly net household income:					
☐	☐	☐	☐		
< 800 EUR	800 – 1499 EUR	1500 – 2500 EUR	> 2500 EUR		
Please state your highest level of education attained:					
☐	☐	☐	☐	☐	☐
Basic school diploma	Secondary school diploma	A-Level	Completed training	Completed (technical) university studies	Other type of degree

Appendix C. Research Project Questionnaire

Dear Participant,

this survey is being conducted as part of my master's thesis at the University of Vienna. Your participation will help me a lot! The survey aims to explore your perception of corporate social responsibility and its impact on customer satisfaction in the context of out-of-stock goods. This survey is for academic use only and will not be disclosed for commercial interests.

*Corporate Social Responsibility is the social responsibility of companies in terms of sustainable business practices.

Please read the following carefully:

It is important that you read the questions carefully and follow the instructions carefully.

There is no wrong or right answer, we just want to hear your opinion.

Most questions ask you to indicate the level of your agreement (low/high) with a particular statement. Please select the number 7 if you fully agree with a statement and the number 1 if you strongly disagree with a statement. You may also choose a number between 1 and 7.

There is no time limit for this questionnaire. Please take your time to complete it.

Thank you for your participation and your time!

In the following step, you will be presented with a scenario. Please try to imagine yourself in the situation described.								
Scenario 1 or Scenario 2 is presented.								
In the following we would like to know something about your satisfaction. Please indicate how you felt about the described situation.								
1. Having experienced the situation described above, how satisfied are you?								
Very satisfied	①	②	③	④	⑤	⑥	⑦	Not satisfied at all
2. Having experienced the situation described above, hoe pleased are you?								
Very pleased	①	②	③	④	⑤	⑥	⑦	Not pleased at all
3. Having experienced the situation described above, how content are you?								
Very content	①	②	③	④	⑤	⑥	⑦	Not content at all
4. Having experienced the situation described above, how delighted are you?								
Very delighted	①	②	③	④	⑤	⑥	⑦	Not delighted at all
In the following, we would like to hear about your skepticism toward corporate social responsibility.								
1. Undoubtedly, this is a socially responsible supermarket								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
2. It's safe to say that this supermarket is all about improving the well-being of society.								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
3. It is certain that this supermarket follows high ethical standards.								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree
4. It is undeniable that this supermarket acts in a socially responsible manner.								
Strongly agree	①	②	③	④	⑤	⑥	⑦	Strongly disagree

Below we will briefly describe some people. Please indicate whether such a person is similar to you or not.								
1. Wealth is important to him/her. He/she wants to own a lot of money and luxury goods.								
Fully resembles me	①	②	③	④	⑤	⑥	⑦	Does not resemble me at all
2. It is important to him/her to be respected by others. He/she wants people to do what he/she says.								
Fully resembles me	①	②	③	④	⑤	⑥	⑦	Does not resemble me at all
3. It is important for him/her to prove his/her abilities. He/she wants people to admire him/her for what he/she does.								
Fully resembles me	①	②	③	④	⑤	⑥	⑦	Does not resemble me at all
4. It is important for him/her to be very successful. He/she hopes that other people will recognize his/her achievements.								
Fully resembles me	①	②	③	④	⑤	⑥	⑦	Does not resemble me at all
5. It is important to him/her to help the people around him/her. He/she wants to take care of their well-being.								
Fully resembles me	①	②	③	④	⑤	⑥	⑦	Does not resemble me at all
6. It is important to him/her to be loyal to his/her friends. He/she wants to be there for the people close to him/her.								
Fully resembles me	①	②	③	④	⑤	⑥	⑦	Does not resemble me at all
7. For him/her it is important that every person in this world should be treated equally. He/she believes that every person should have the same opportunities in life.								
Fully resembles me	①	②	③	④	⑤	⑥	⑦	Does not resemble me at all
8. It is important for him/her to listen to people who are different from him/her. Even if he/she does not agree with them, he/she still wants to understand them.								
Fully resembles me	①	②	③	④	⑤	⑥	⑦	Does not resemble me at all

At the end please fill in some demographic data for statistical purpose.					
Please state your gender:					
☐ Female		☐ Male		☐ Divers	
Please specify your place of residence:					
☐ Germany		☐ Austria			
Please state your age:					
Please state your monthly net household income:					
☐	☐	☐	☐		
< 800 EUR	800 – 1499 EUR	1500 – 2500 EUR	> 2500 EUR		
Please state your highest level of education attained:					
☐	☐	☐	☐	☐	☐
Basic school diploma	Secondary school diploma	A-Level	Completed training	Completed (technical) university studies	Other type of degree

Appendix D. Results of the Pre-Test

Variables: credibility of the scenario, perception of CSR, understanding of CSR initiative, understanding of anti-food-waste ambition

Cronbach's alpha, Mean, Standard deviation (Group 1 / No CSR)

	Credibility	Perception CSR
Cronbach's α	0.843	0.873
Mean	5.686	4.600
Standard Deviation	1.318	1.474

(scale from 1=strongly disagree;7=strongly agree)

Cronbach's alpha, Mean, Standard deviation (Group 2 / CSR)

	Credibility	Perception CSR	Understanding CSR	Understanding Food Waste
Cronbach's α	0.843	0.948	0.949	0.817
Mean	3.788	5.700	5.888	5.700
Standard Deviation	1.746	1.475	1.342	1.290

(scale from 1=strongly disagree;7=strongly agree)

T-Test for independent samples (CSR Perception)

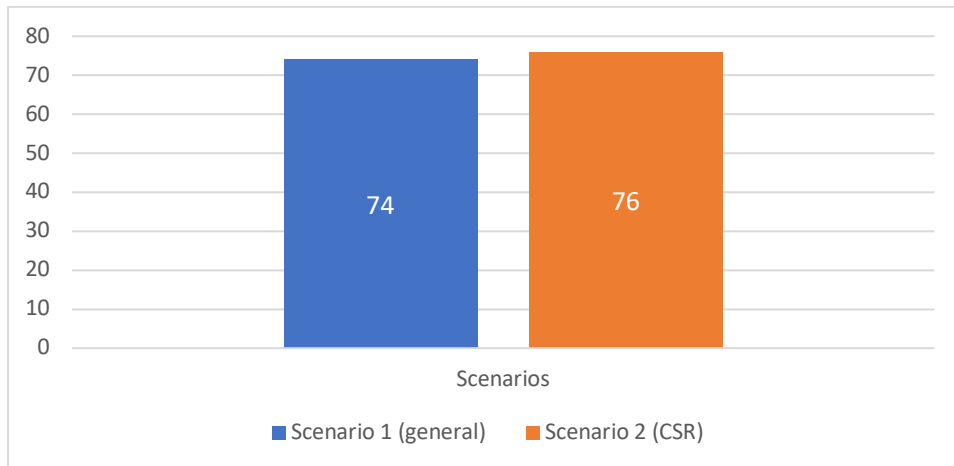
Variable: CSR Perception

Scale	Group 1 M $\pm$ SD	Group 2 M $\pm$ SD	df	Sig. (2-tailed)	t
CSR Perception	4.60 $\pm$ 1.47	5.70 $\pm$ 1.48	73	0.002	-3,22

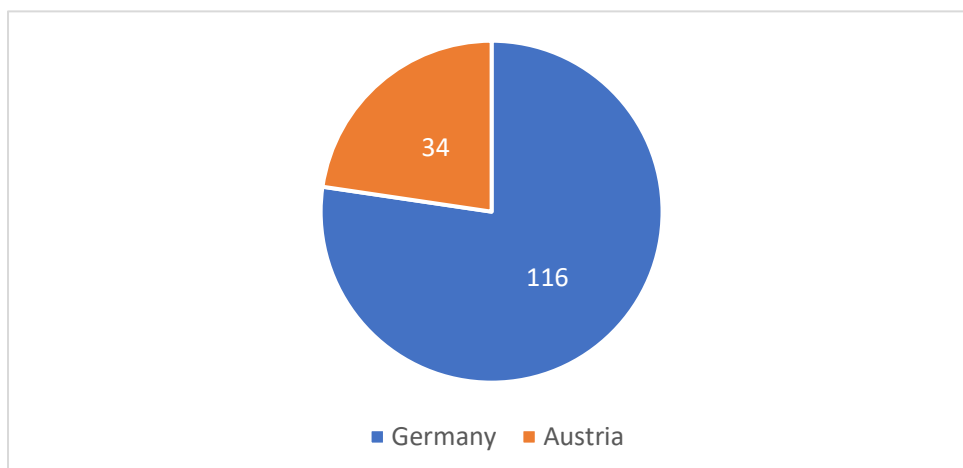
(scale from 1=strongly disagree;7=strongly agree)

Appendix E. Sample Demographics

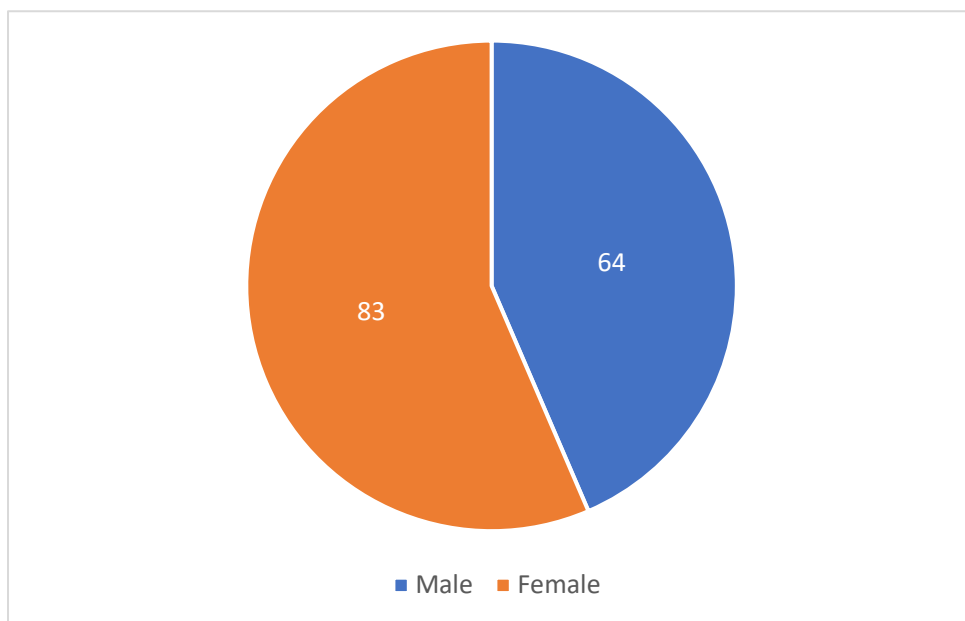
Distribution of Scenarios



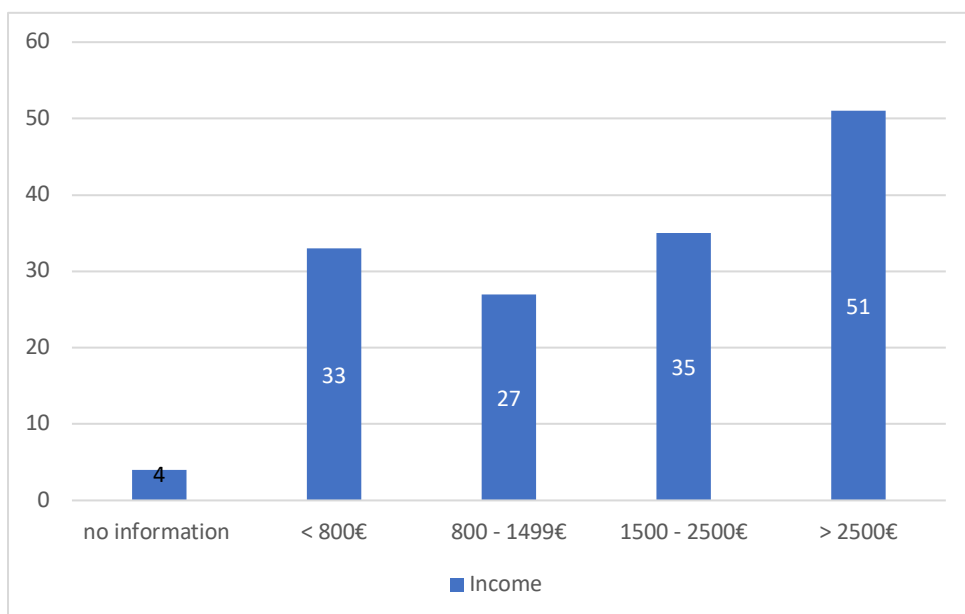
Origin of respondents



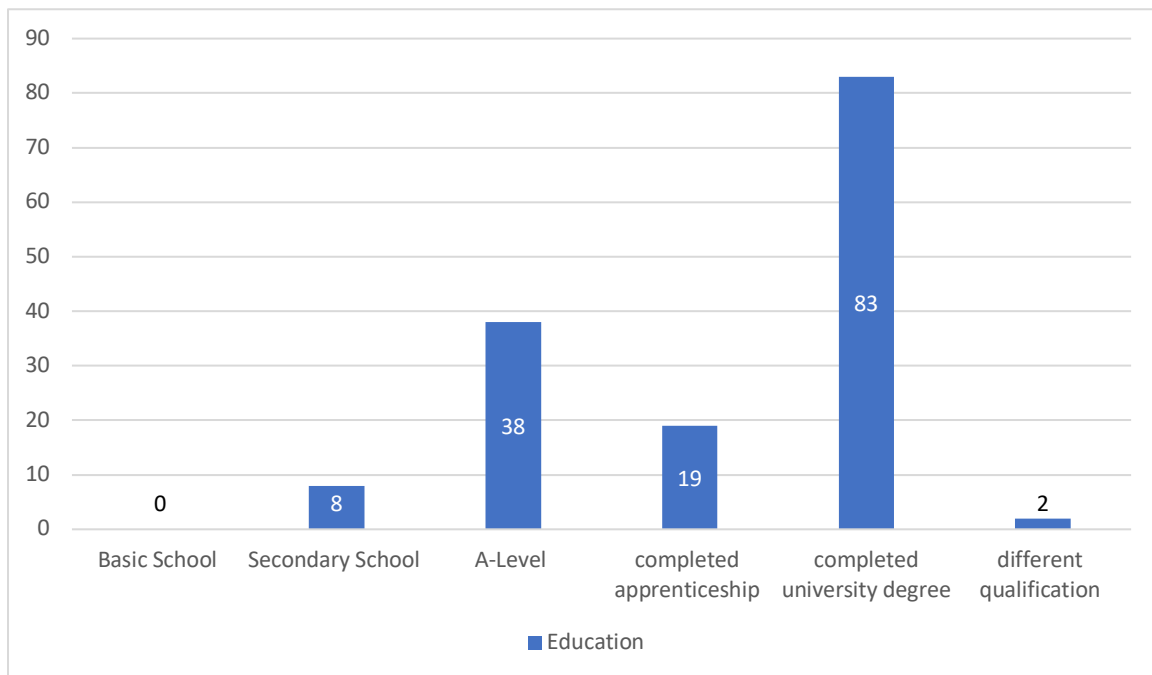
Gender of respondents



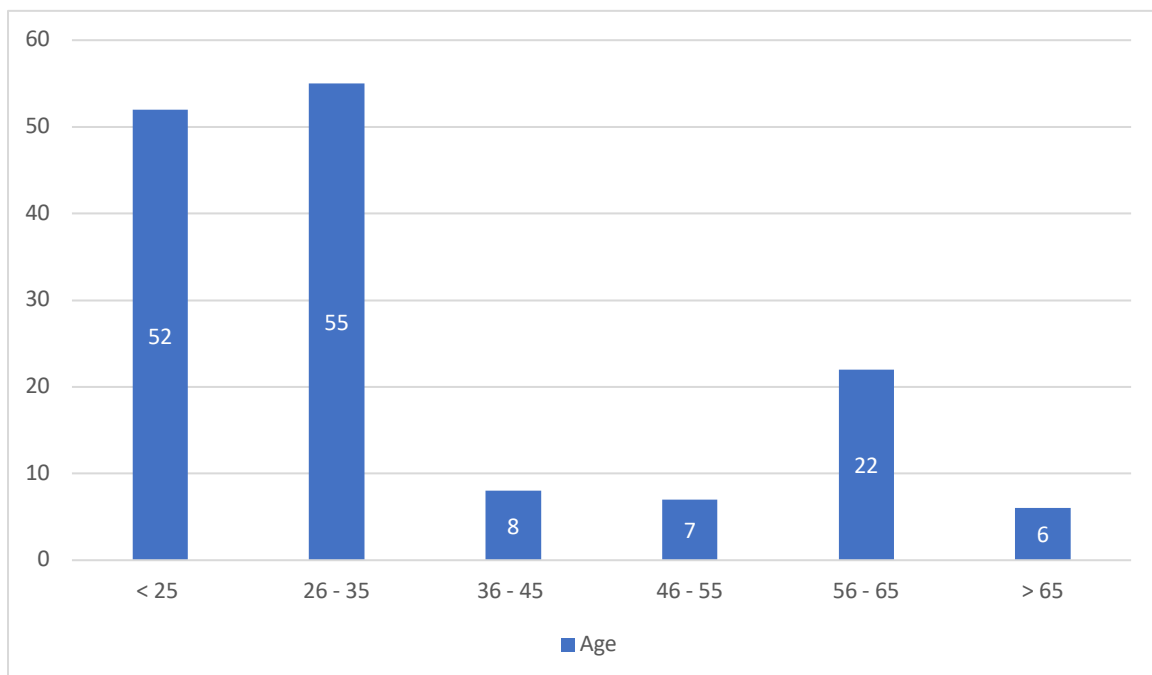
Income of respondents



Education of respondents



Age of respondents



Appendix F. Reliability Statistics and Correlation

	CS_SIT	ST	SE	CSR_SKT
Cronbach's Alpha	0.803	0.707	0.739	0.915
N of Items	4	4	4	4

	CS_SIT	ST	SE	CSR_SKT	SCENARIO
CS_SIT	1	.156	-.178*	.343**	.193*
ST	.156	1	.015	.152	.003
SE	-.178*	.015	1	.026	-.140
CSR_SKT	.343**	.152	.026	1	.364**
SCENARIO	.193*	.003	-.140	.364**	1

n = 150

p < 0.01**| p < 0.05 *

Appendix G. Data Analysis

Self-Enhancement

Regression 1

Predictor Variables: Scenario, Self-Enhancement

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.246	.060	.048	1.26766	2.175

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	4.057	.527		7.694	.000		
Scenario	.444	.209	.171	2.122	.017	.980	1.020
Self-Enhancement	-.176	.092	-.154	-1.906	.029	.980	1.020

*Unstandardized **Standardized

Significance level divided by two because of directional hypothesis

Regression 2

Predictor Variables: Scenario, Self-Enhancement, Interaction term Scenario*Self-Enhancement

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.277	.077	.058	1.26085	2.175

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	2.200	1.267		1.736	.042		
Scenario	.448	.208	.173	2.156	.017	.980	1.021
Self-Enhancement	.282	.299	.247	.943	.174	.093	10.804
Scenario * Self - Enhancement	-.297	.185	-.420	-1.610	.055	.093	10.772

*Unstandardized **Standardized

Significance level divided by two because of directional hypothesis

Self-Transcendence

Regression 1

Predictor Variables: Scenario, Self-Transcendence

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.247	.061	.048	1.26715	2.183

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	1.894	.783		2.420	.009		
Scenario	.498	.207	.192	2.407	.009	1.000	1.000
Self-Transcendence	.239	.123	.155	1.938	.028	1.000	1.000

*Unstandardized **Standardized

Significance level divided by two because of directional hypothesis

Regression 2

Predictor Variables: Scenario, Self-Transcendence, Interaction term Scenario*Self-Transcendence

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.249	.062	.043	1.27100	2.183

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	2.569	2.171		1.183	.120		
Scenario	.498	.208	.192	2.399	.009	1.000	1.000
Self-Transcendence	.122	.371	.079	.328	.372	.111	9.045
Scenario * Self - Transcendence	.085	.256	.080	.334	.370	.111	9.045

*Unstandardized **Standardized

Significance level divided by two because of directional hypothesis

CSR Skepticism

Regression 1

Predictor Variables: Scenario, CSR Skepticism

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.351	.123	.111	1.22470	2.163

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	2.518	.374		6.725	.000		
Scenario	.203	.215	.078	.944	.347	.867	1.153
CSR Skepticism	.281	.074	.315	3.793	.000	.867	1.153

*Unstandardized **Standardized

Significance level divided by two because of directional hypothesis

Regression 2

Predictor Variables: Scenario, CSR Skepticism, Interaction term (Scenario * CSR Skepticism)

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.353	.125	.107	1.22759	2.163

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	3.016	.971		3.107	.000		
Scenario	.199	.215	.077	.924	.179	.867	1.154
CSR Skepticism	.161	.229	.180	.702	.242	.091	10.954
Scenario * CSR Skepticism	.083	.149	.142	.556	.290	.092	10.879

*Unstandardized **Standardized

Significance level divided by two because of directional hypothesis

Control Variable: Age

Regression 1

Predictor Variables: Scenario, Age

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.207	.043	.030	1.27738	2.211

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	3.108	.405		7.681	.000		
Scenario	.522	.210	.202	2.480	.014	.997	1.003
Age	.003	.007	.039	0.476	.635	.997	1.003

*Unstandardized **Standardized

Regression 2

Predictor Variables: Scenario, Age, Interaction term (Scenario * Age)

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.215	.046	.026	1.27975	2.211

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	2.588	.405		2.992	.000		
Scenario	.520	.211	.201	2.469	.015	.997	1.003
Age	.019	.024	.214	.792	.430	.090	11.054
Scenario * Age	-.010	.015	-.184	-.680	.497	.091	11.049

*Unstandardized **Standardized

Control Variable: Gender

Regression 1

Predictor Variables: Scenario, Gender

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.193	.037	.024	1.28322	2.182

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	3.289	.421		7.808	.000		
Scenario	.502	.212	.194	2.371	.019	.982	1.019
Gender	-.014	.197	-.006	-.071	.943	.982	1.019

*Unstandardized **Standardized

Regression 2

Predictor Variables: Scenario, Gender, Interaction term (Scenario * Gender)

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.194	.038	.018	1.28730	2.189

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	3.053	.998		3.057	.003		
Scenario	.660	.640	.255	1.030	.305	.108	9.279
Gender	.143	.633	.059	.226	.821	.096	10.461
Scenario * Gender	-.103	.395	-.098	-.262	.794	.047	21.099

*Unstandardized **Standardized

Control Variable: Income

Regression 1

Predictor Variables: Scenario, Income

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.207	.043	.020	1.28416	2.183

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	3.643	.442		8.233	.000		
Scenario	.454	.214	.175	2.123	.035	.987	1.013
Income	-.102	.092	-.092	-1.114	.267	.987	1.013

*Unstandardized **Standardized

Regression 2

Predictor Variables: Scenario, Income, Interaction term (Scenario * Income)

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.214	.046	.026	1.28644	2.183

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	3.106	.882		3.521	.001		
Scenario	.455	.214	.175	2.122	.036	.987	1.013
Income	.092	.291	.082	.316	.753	.098	10.154
Scenario * Income	-.129	.184	-.183	-.703	.483	.099	10.138

*Unstandardized **Standardized

Control Variable: Education

Regression 1

Predictor Variables: Scenario, Education

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.207	.043	.030	1.27935	2.194

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	3.720	.579		6.424	.000		
Scenario	.477	.210	.184	2.266	.025	.987	1.013
Income	-.098	.104	-.077	-0.946	.345	.987	1.013

*Unstandardized **Standardized

Regression 2

Predictor Variables: Scenario, Education, Interaction term (Scenario * Education)

Dependent Variable: **Consumer Satisfaction**

R	R ²	Adjusted R ²	SE of the Estimate	Durbin-Watson
.207	.043	.023	1.28372	2.194

Model	Coefficients*		Coefficients**	t	Sig.	Collinearity	
	B	SE	Beta			Tolerance	VIF
(Constant)	3.708	1.461		2.538	.012		
Scenario	.477	.211	.184	2.258	.025	.987	1.013
Income	-.095	.331	-.075	-.288	.774	.098	10.241
Scenario *	-.002	.208	-.002	-.009	.993	.098	10.225
Income							

*Unstandardized **Standardized

Appendix H. German Abstract

Ziel der Arbeit. Ziel der vorliegenden Arbeit war es, zu analysieren, ob Anti-Food-Waste-Bestrebungen die Unzufriedenheit der KonsumentenInnen in einer Stockout-Situation mindern. Weiterhin werden die moderierenden Effekte von Self-Enhancement/Selbstwerterhöhung, Self-Transcendence/Selbsttranszendenz und CSR-Skepsis auf diesen Zusammenhang untersucht.

Methode. Es wurde eine webbasierte Szenariotechnik angewandt und eine digitale Befragung durchgeführt, um die Hauptkonstrukte in Bezug auf Verbraucherzufriedenheit, Self-Enhancement, Self-Transcendence und CSR-Skepsis zu messen. Allen Teilnehmern wurde zunächst nach dem Zufallsprinzip ein Szenario präsentiert, das entweder eine CSR-bezogene Erklärung für den Lieferengpass mit dem Ziel, Lebensmittelverschwendung zu bekämpfen enthielt oder nur die Information, dass das Produkt nicht mehr lieferbar ist. Danach füllten die Befragten den Fragebogen aus. Die Antworten von 150 Teilnehmern wurden ausgewertet.

Ergebnisse. Es wurde festgestellt, dass die Begründung für den Stockout, Lebensmittel Verschwendung verringern zu wollen, einen signifikanten Einfluss auf die Verbraucherzufriedenheit hat. Genauer gesagt waren die Teilnehmer, die das CSR-bezogene Szenario erhielten, nach dem aufgetretenen Stockouts weniger unzufrieden als die Gruppe, die nur die Information erhielt, dass das Produkt nicht mehr vorrätig ist. Signifikante moderierende Effekte von Self-Enhancement, Self-Transcendence oder CSR-Skepsis wurden nicht gefunden.

Conclusion. Die Ergebnisse dieser Untersuchung zeigen, dass Anti-Food-Waste-Bestrebungen des Lebensmitteleinzelhandels die Unzufriedenheit der Konsumenten nach einer Stockout Situation mindern können. Dies bietet empirische Belege dafür, dass Verbraucher diese Maßnahmen der Einzelhändler schätzen und es ihre emotionale Reaktion auf eine Fehlbestandsituation beeinflusst. Die Strategie der Lebensmittelabfallreduzierung durch Verringerung des Angebotsüberhangs bietet, wenn sie erfolgreich angewendet wird, die Möglichkeit, die Lebensmittelverschwendung zu bekämpfen und gleichzeitig die Kosten für die Abfallentsorgung zu senken.

Keywords: Lebensmittelverschwendung, Food waste, stockout, OOS, Konsumenten-zufriedenheit, consumer satisfaction, Corporate Social Responsibility