



THE EFFECT OF EXCESSIVE PACKAGING ON THE CONSUMERS' PERCEPTION OF THE RETAILER

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Abstract

Background

Due to growing online retailing business, more and more packages have to be delivered to the consumer. These products are often excessively packed. How consumers perceive the retailer after they have received the package home, is important information. Therefore, the effect of excessive packaging on the consumer's perception of the retailer is researched in this study. Participant's biospheric values have also been measured to see if they have an effect on the consumers' retailer perception.

Research question

The main research question is: 'What is the effect of excessive packaging on the consumer's perception of the retailer?'. This question was researched in an experiment with 106 participants.

Methodology

An experiment has been done with the help of an online survey, where one factor was manipulated, the packaging. In the excessive packaging condition, participants got to see a package that was excessively packed and were asked about their attitude towards the retailer and their biospheric values have been measured. The same hold for the minimal packaging conditions, where participants got to see a package that was minimally packed.

Results

It is found that excessive packaging will lead to a more negative retailer perception than minimal packaging. There has also been found a significant effect of biospheric values on the retailer perception in the minimal packaging condition, but not in the excessive packaging condition.

Discussion

This study is a unique one, as it was the first to research the effect of excessive packaging on the retailer perception, after an online order has been arrived. It can be the start of more awareness of excessive packaging by online retailers and can ultimately result in the use of less packaging materials.

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Introduction

More and more people order products online these days and therefore the following phenomenon will sound familiar to a lot of people. Maybe you have experienced it yourself as well. You ordered something online and after a short amount of time you receive your package at home. You are opening up the box that is around your product, to finally see the product you have ordered. But in a lot of cases, seeing your product means that you first have to go through a lot of packaging materials. You have to open the big box, get through a lot of plastic materials, you have to open another box perhaps and finally there is your product wrapped up in bubble wrap, which is a lot smaller than the package you have just received. Not to forget that there is foam to find in a lot of cases as well. Obviously, the products need to be packaged and transported to the consumer in a way that the product does not get damaged. However, these products are often excessively packed. Excessive packaging has been described as ‘products that are wrapped in more material than is needed or is wanted’ (Elgaaied-Gambier, 2016). This often means that products are packed in large boxes filled with air-bags, shrink wrap or bubble wrap. These materials are used for protecting the product (Brisson, 1993), but can be minimized.

Online retailing is an internet-based business, which delivers products and services and is becoming more and more important these days. The reason for this is that it has opportunities and implications for both buyers and sellers (Eroglu, S. et al, 2001). The products that consumers receive when they have ordered a product online, are packaged. Packaging is needed for several reasons. Robertson (1990) calls in his research specific packaging functions. One of these reasons for packaging is that it is needed for the protection of a product in movement. During the transportation process, the product undergoes a large trip from the producer to the consumer and therefore needs to be well protected as it has an increased risk in damage and spoilage. This is the most important reason why online retailers make extra costs for packaging

(Robertson, 1990). As mentioned earlier, this protection packaging often leads to excessive packaging.

Excessive packaging brings a problem with it as packaging has environmental impacts that are not sustainable in the long-term. These environmental impacts include for example land degradation as a result of the extraction of renewable and non-renewable resources, energy consumption, generation of greenhouse gases, air and water pollution and impacts associated with litter (Verghese, 2007). More and more consumers have realized that their purchase behavior has a negative influence on the environment. Consumers reacted to the new threatening ecological problems by considering environmental issues when shopping. This includes for example that more consumers buy only ecologically compatible products, like CFC-free hairspray and unbleached coffee filters (Laroche, 2001). Worldwide environmental protection is becoming more popular and therefore eco-friendliness is the trend nowadays (Hao et al., 2019). As said, the packaging of a product is closely related to environmental problems and therefore consumers are increasingly striving for green packaging. Consumers want to achieve a balance between economic growth and ecological development with the use of more sustainable packaging (Hao et al., 2019).

Rokka and Uusitalo (2008) found that respondents liked environmentally-friendly packaging (i.e., recyclable packages) more than packaging that was not explicitly environmentally friendly (i.e., non-recyclable drink containers). Therefore, it does seem that people value environmentally-friendly packaging more. However, it is unclear how the (excessive) packaging of products people have ordered online influences their perception of the retailer. Nevertheless, this is very important as it is the first physical contact with the product and therefore also the only moment that the retailer and the consumer actually physically meet each other (Rundh, 2005). For the consumer, it is the moment to judge the product. The first impression of the package can also leave an important impression of the retailer. This research

contributes to the knowledge about the perception of the retailer by the consumer. Having more information about the perception of the retailer by the consumer is very important. Due to the growing internet business there is increased competition and it is hard for a company to distinguish itself from others. Thereby, minimal customer switching costs, the costs that a consumer experiences when it changes brand or supplier, makes it more difficult to retain customers. For these reasons, this is important information that can be helpful to retain customers (Wallace et al., 2004). In this particular research, the perception of the retailer by the consumer is studied after it receives a package that is excessively packed. Therefore the main research question of this research is:

What is the effect of excessive packaging on the consumers' perception of the retailer?

With the help of a survey, the effect of excessive packaging on the assessment of the retailer in terms of satisfaction by the consumer is researched. These findings will provide some new and important insights into the psychology of online retailing. It will give new information about the thoughts of consumers when they get their package home, which is an important moment as it is the only moment the retailer and consumer physically meet each other. The findings can be helpful for online retailers as they now know how their excessive packaging affects the customers and thereby also the company and this may lead to the use of other packaging techniques. The decreasing use of excessive packaging will then contribute positively to the environmental problems we are facing today.

Literature review

Online retailing has become more and more important these days. These products need to be packaged and transported to the consumer, in a way that it protects the product. However, online retail products are often excessively packed. This means that products are packed in large boxes filled with air-bags, shrink wrap or bubble wrap (Brisson, 1993). Companies do this for the protection of a product, as it sometimes undergoes a large journey to the home of the consumer (Robertson, 1990), but it can be minimized. The extra packaging materials are bad for the environment and reduction of these packaging materials will therefore positively contribute to the environment. For this reason, it would be ideal that no online retail orders are packaged excessively, but instead packaging should be minimized, which would be considered minimal packaging. Minimal packaging is the opposite of excessive packaging and has in this research two characteristics. Firstly, it means that the ratio between product and packaging is small. This is often not the case with excessive packaging, as there is most of the time a small product with a large box and the leftover space in between is filled with plastic and other material. To leave out these extra materials, the ratio between product and box must be small, which means that the box around the product is just a little bit bigger. Secondly, minimal packaging means that there is as little protection material as needed and that the amount of it is adjusted to the sort of product. That means that for example fragile products, there is more protection material than for non-fragile products.

One of the downsides of excessive packaging is that it is bad for the environment. The concepts of sustainability and eco-friendliness are becoming more and more important (Hao et al., 2019). As a result, consumers are more concerned about the environment and the impact of their consumption on it (Lee & Yun, 2015). Consumers are changing their behaviour and consume more environmentally friendly products, which is often referred to as 'green consumption' (Perera et al., 2016). Next to that, consumers have also an increased

consciousness of the packaging (Stolz et al., 2013). For this reason, consumers have been demanding more environmentally-friendly packaging, reduced packaging and packaging that is possible to be recycled and reused (Rundh, 2005). Consumer's preferences of packaging play an important role, as packaging is an important element of the marketing mix. Packaging is the fifth 'P' of the marketing mix and the attributes of packaging such as colour, design form and message, can help to communicate towards the consumer. It communicates brand identity and positions the product within a concrete category (Gómez et al., 2015). Packaging can also be connected with design and considered to be an element that strengthens the businesses' image along with the logo, brochures and commercials (Bruce and Daly, 2007). Besides that, packaging can account for a third of the overall consumers utility of a product (Rokka and Uusitalo, 2008). It can thus be stated that packaging is very important.

Positive beliefs excessive packaging

Research done by Elgaaied-Gambier (2016), studied consumers' reactions to excessive packaging in the food sector. The respondents were asked about their beliefs associated with excessive packaging. Some people had positive beliefs about excessive packaging. They saw it as a sign of quality and associated it with top-of-the-line, premium brands. They also thought that the extra packaging material was useful as it had a protecting effect.

Negative beliefs excessive packaging

There were also people in this same research who had negative beliefs about excessive packaging. This is because they think it is harmful for the environment. Especially due to the pollution generated by the increase in the volume of waste. Furthermore, some respondents mentioned that according to them, the use of the extra material would generate extra costs for the manufacturers, which is likely to affect the final selling price. These extra costs seem to be

extra deterrent for the people who do not see the utility of the extra packaging. Also, excessive packaging increases the total waste households have (Elgaaied-Gambier, 2016).

The packaging that the consumer sees when it gets a product at home, leaves behind a first impression of the product and can thereby also leave a perception of the online retailer. Perception of the retailer means the attitude of the consumer towards the retailer (Morschett et al., 2005). This can be positive or negative. As a result of the above mentioned negative associations consumers have with excessive packaging, and the earlier mentioned fact that people are increasingly concerned about the environment, it is expected in this research that excessive packaging leads to a more negative perception of the retailer. Therefore, Hypothesis 1 is as follows. H1: Excessive packaging will lead to a more negative perception of the retailer than minimal packaging.

Environmental concern

People are increasingly concerned about the environmental problems. However, this does not mean that everybody is in the same extent concerned about the environment. Environmental concern is defined in most research as an evaluation of, or an attitude towards facts, one's own behaviour, or others' behaviour with consequences for the environment (Takala, 1991). It can refer to both a specific attitude directly determining intentions or more broadly to a general attitude or value orientation (Fransson & Gärling, 1999). Some people are highly concerned about it and some are not concerned about the environment at all. Research by Van der Werff et al. (2014) showed that there is a relationship between biospheric values and environmental self-identity. When you endorse biospheric values, you care for nature and the environment. People who have strong biospheric values are more likely to have pro-environmental preferences, behavior and intentions (Steg & De Groot, 2012). Moreover, they found that biospheric values are related to preferences, intentions, and behaviour via one's environmental self-identity. This means that values need to be linked to the self in order to

influence choices people make. Other researchers have found that there are some underlying personal characteristics that explain the differences in environmental concern. They have tried to explore what the links between socio-demographic characteristics of an individual and their environmental concern are. These social characteristics include gender, age, income and education. These characteristics are there to identify what type of individual is most concerned about environmental issues. For gender, previous studies have found that women express slightly more environmental concern than men (Dietz et al., 2002; McCright, 2010; Xiao and McCright, 2015). For age, it is found that younger people tend to be more concerned about the environmental issues than older people (Shen & Saijo, 2008; Arcury et al., 1987; Arcury & Christianson, 1990). When looking at income, it is found that people with a higher income levels are associated with higher levels of environmentalism (Arcury et al., 1987; Arcury & Christianson, 1990). The social class effect states that education and income are positively related to environmental concern. One explanation for this is based on Maslow's hierarchy of needs theory (Maslow, 1943). It rests on the assumption that concern about the environments has a property of luxury goods, which can be indulged only when basic material needs are fulfilled (Shen & Saijo, 2008).

People are thus different in their degree of environmental concern. It can be expected that people who are highly environmentally concerned, will perceive the retailer as more negative when the products are excessively packed than people who are not. This is because excessive packaging is bad for the environment and people who are concerned about the environment will thus see this as something negative. They are more likely to have pro-environmental preferences, and will therefore prefer minimal packaging. For this reason, Hypothesis 2 is as follows. H2: People who are highly concerned about the environment will have a more negative retailer perception with excessive packaging than people who are not.

All this together, will lead to the conceptual model that can be seen in Figure 1 below.

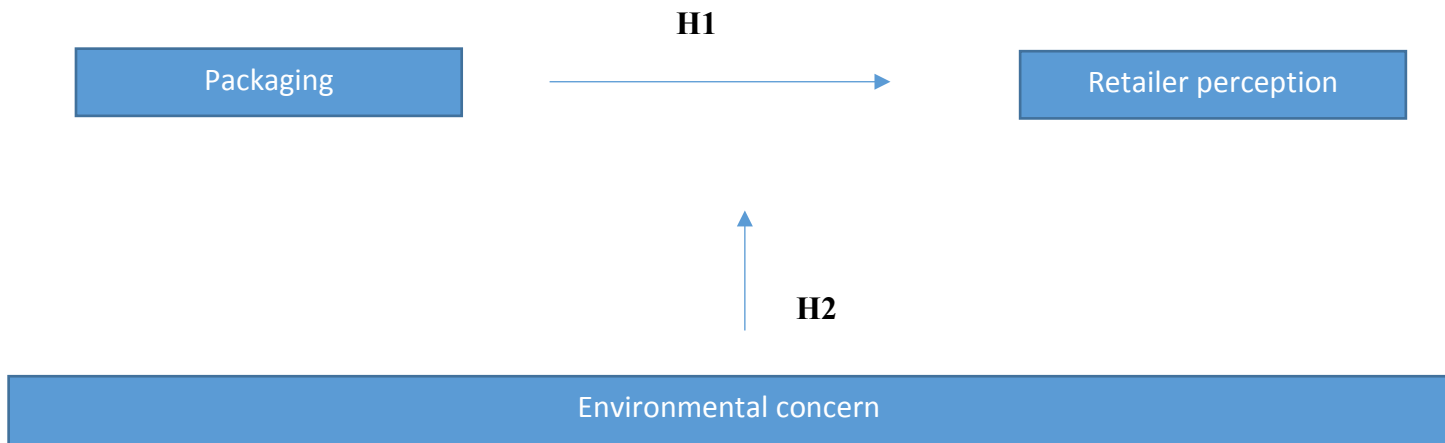


Figure 1 - Conceptual model

The independent variable is ‘packaging’, which consists of excessive packaging and minimal packaging. The dependent variable is ‘retailer perception’ and ‘environmental concern’ is the moderator. Environmental concern is based on personal characteristics that in this research can influence the perception of the retailer when there is excessive packaging and can therefore be called a moderator. This can be measured by looking at consumers’ biospheric values (Van der Werff et al., 2014). This will later be explained in more detail.

In sum, it can be expected that excessive packaging leads to a more negative perception of the retailer than minimal packaging, as it is established that people are increasingly concerned about the environment, find the excessive packaging of little use, fear potential additional costs and will have also more household waste. The consumers’ biospheric values can have an influence on this.

Method

Participants and design

Participants for this research were recruited by placing a survey on online social media platforms like Facebook and WhatsApp and with the help of snowball sampling. It was expected that all respondents would speak the Dutch language due to snowball sampling, therefore the survey was in Dutch. In total, 131 participants took part in the experiment. As not everyone had finished the survey, 25 respondents had to be deleted. Therefore, an analysis has been done among 106 respondents. Of all these participants, 30 were man and 76 were women. The mean age of these participants was 26.86 years ($SD=14.423$). The participants were randomly assigned to one of the two conditions: the minimal packaging condition or the excessive packaging condition.

Measures and procedure

The hypotheses have been tested in a between-subjects experimental design including two conditions. It has made use of a survey with the help of Qualtrics.

Informed consent

Participants first had to agree with the informed consent. By clicking on 'yes', they said that they have read the informed consent and that they agreed with it. The informed consent stated that the participant would stay anonymous and that the data would not be given to others. It stated also that there were no risks or benefits associated with participating in this research. Furthermore, they were informed that they could quit filling out the survey anytime if they wanted to. They also had the option to click on 'no'. Then, the participant was lead to the end page of the survey and the data was not taken into analysis.

Control

For this research, it was important that all respondents had at least once ordered something online and that they had opened that package themselves. This was needed so that all respondents could well imagine themselves receiving a packaging, either excessively packaged or minimally packaged. Therefore, the participants were asked the following question: ‘Have you ordered something online at least one time and have you opened this package yourself?’ They could choose the answer options ‘Yes’ or ‘No’. The people who answered ‘No’, were lead to the end page of the survey and the data was not taken into analysis.

Conditions

To test the effect of excessive packaging, participants were randomly assigned to the minimal or excessive packaging condition. First, they were asked to read a story in which they were told that they have just ordered an online product, a phone charger adapter, that they would now receive. There has been chosen for a phone charger adapter, because this is a product that almost everybody uses, no matter what gender or age someone has. After that, they got to see photos of the package: the outside of the package, the first thing they see when they open it, a photo from the inside and a photo of all the materials that were inside of the box. As there were two different conditions, the participants thus got to see photos of either a minimally packaged phone charger adapter or an excessively packaged phone charger adapter.

Retailer perception

The dependent variable was retailer perception. Perception of the retailer means the attitude of the consumer towards the retailer (Morschett et al., 2005). In earlier studies, retailer perception has already been measured. Barone et al., (2007) has used such a scale in his research. As it has been used before, this scale can be seen as a valid scale. Therefore, the way it is measured in that study has been used in this research as well. A three item measure was used to measure the attitude towards the retailer. The question that was asked was: ‘You have just received a

package from an online store, what is your attitude towards that retailer?'. Where people had to fill in a three item measure on a 9-point bipolar scale (where: 1 = unfavorable, 9 = favorable; 1 = negative, 9 = positive; 1 = bad, 9 = good). A Cronbach's Alpha has been calculated to check whether the scale was reliable. It could be concluded that it was a reliable scale, as a Cronbach's Alpha of 0.958 was found, which is higher than 0.7.

Environmental concern

The moderator of this research was 'environmental concern'. The degree of environmental concern of a person is dependent on their biospheric values. People who have strong biospheric values are more likely to have pro-environmental preferences, behavior and intentions (De Groot & Steg, 2008). De Groot & Steg (2008) used four items to measure these biospheric values. Participants rated the importance of each value item as a guiding principle in their life on a 7-point Likert scale (1= not at all important, 7= Extremely important). One example of these items was: 'Respecting the earth: harmony with other species'. Again, a Cronbach's Alpha has been calculated to check whether the scale was reliable. This resulted in a Cronbach's Alpha of 0.896, out of which could be concluded that this was a reliable scale as it was higher than 0.7.

Manipulation check

To check whether the people in the excessive and minimal condition really did find the packages respectively excessively and minimally packaged, the following question has been answered: 'I found the packaging of the phone charger adapter...'. They could choose between these different answers: 'Very minimal', 'Minimal', 'Just right', 'Excessive' or 'Extremely excessive'.

Social demographic characteristics

The background variables participants were asked to report were their age and gender. They were asked: 'What is your gender?', which could be answered by a choice between 'man', 'women' or 'other'. To know their age, participants were asked: 'What is your age?', which they could answer by choosing their age number in the dropdown menu.

The questionnaire in Dutch can be found in the appendix. The English version is available upon request.

Results

Manipulation check

Before the hypotheses have been tested, a manipulation check has been done to check whether the manipulation has worked or not. It has been analyzed if the people from the excessive packaging condition did find the packaging excessively packed. Also, if the people from the minimal packaging condition did indeed find the packaging minimal. To check this, an ANOVA has been done. There was a statistically significant difference between the minimal packaging condition ($M=2.83$, $SD=0.86$) and the excessive packaging condition ($M=4.31$, $SD=1.03$), ($F(1,104)=63.32$, $p<.001$). This means that the people in the excessive packaging condition found the packaging more excessive than the people in the minimal condition. It can be concluded that the manipulation has worked. The frequencies of the excessive packaging and the minimal packaging condition for the manipulation check question can be seen in Figure 2 below.

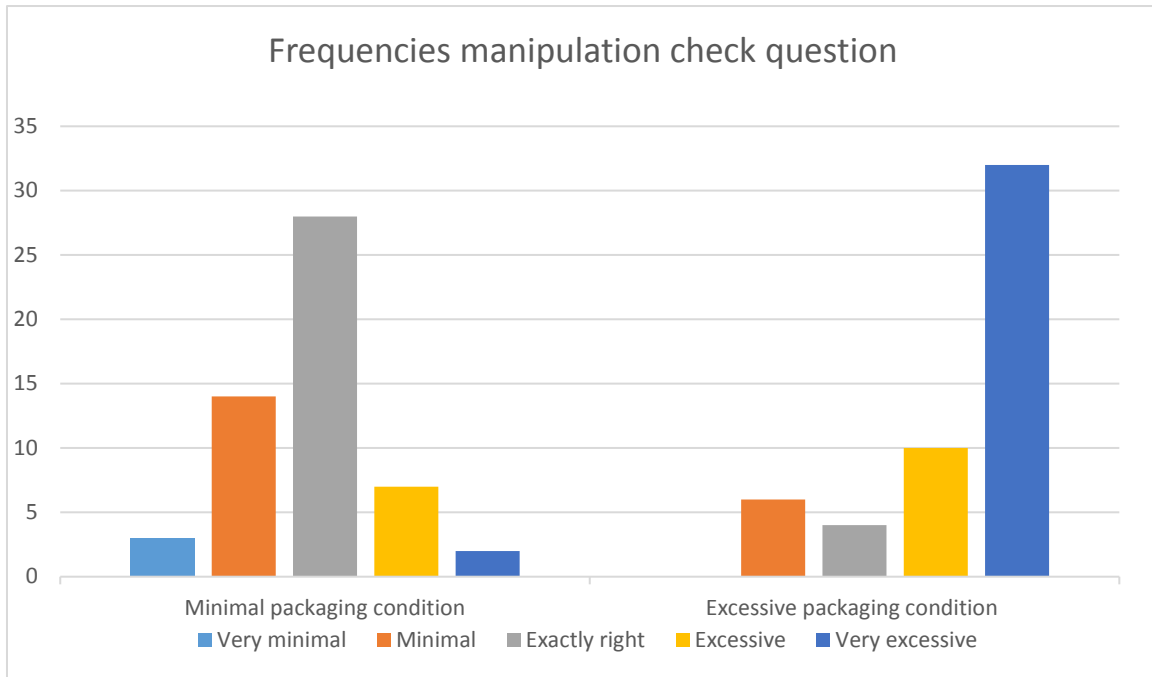


Figure 2 - Frequencies manipulation check question

This table makes clear that the majority of the people in the minimal packaging condition found the packaging minimal or just right. In the excessive packaging people, the majority chose the option ‘very excessive’.

Hypothesis 1

An Independent Samples T-test was done to test Hypothesis 1: ‘Excessive packaging will lead to a more negative perception of the retailer than minimal packaging.’ It has been measured if the participants in the excessive packaging condition (coded as 1) had a more negative retailer perception than the people in the minimal packaging condition (coded as 0). The retailer perception of the excessive packaging condition (M=5.03, SD=2.4) was significantly lower than the retailer perception of the minimal packaging condition (M=6.62, SD=1.46), $F(104)=16.17, p<.001$. For this reason, H1 has been accepted.

Hypothesis 2

To test Hypothesis 2: ‘People who are highly concerned about the environment will have a more negative retailer perception with excessive packaging than people who are not’, several questions were asked to assess the participant’s biospheric values. First, a regression has been done to test the main effect of biospheric values on retailer perception. There has been found a significant effect of biospheric values on retailer perception, $F(103)=12.677$, $p=.007$. With a B of $-.52$, it can be interpreted that the higher the biospheric values, the more negative the retailer perception. With the use of Descriptives, we can see that the biospheric values in the minimal packaging condition ($M=5.14$, $SD=0.96$) are almost the same as the biospheric values in the excessive packaging condition ($M=5.12$, $SD=1.04$). There is no significant difference between these two means, $p=.90$).

For H2 we wanted to know whether people who are highly concerned about the environment will have a more negative retailer perception with excessive packaging than people who are not. Therefore, an ANOVA has been done. The ANOVA results show that there is a significant effect of biospheric values on the retailer perception, $F(102)=7.177$, $p=0.009$. In the Parameter Estimates table below, the results for the minimal packaging condition can be found.

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval Lower Bound	Upper bound
Intercept	8.88	1.35	6.54	<.001	6.19	11.57
Condition=Minimal	-.91	1.97	-.46	.646	-4.83	3.00
Biosphericvalues	-.75	.26	-2.89	.005	-1.26	-0.23
Condition=Minimal*biosphericvalues	.49	.37	1.29	.198	-.26	1.24

Table 1 -Parameter Estimates minimal packaging condition, Dependent variable: retailerperception

As $p=.198$, we can conclude that there is no significant effect of the interaction of the biospheric values and the minimal packaging condition on the retailer perception. However, there is a significant main effect of biospheric values in the minimal condition. Which means that the differences in retailer perception can be explained by the participants' biospheric values.

Down below, the Parameter Estimates table from the excessive packaging condition can be seen.

Parameter	B	Std.Error	t	Sig.	95% Confidence Interval Lower bound	Upper bound
Intercept	7.97	1.43	5.54	<.001	5.12	10.82
Condition=1.00	.91	1.97	.46	.646	-3.00	4.83
Biosphericvalues	-.26	.27	-.95	.343	-.80	.28
Condition=1.00*biosphericvalues	-.49	.37	-1.29	.198	-1.24	.26

Table 2 - Parameter Estimates excessive packaging condition, Dependent variable: retailerperception

We can conclude that there is no significant effect of the interaction effect of the excessive packaging condition and the biospheric values on the perception of the retailer. There is also no significant main effect of the biospheric values in the excessive packaging condition on the retailer perception.

These outcomes are in contrast with Hypotheses 2, which expected a significant difference of the biospheric values on the retailer perception in the excessive packaging condition. For this reason, Hypotheses 2 was rejected.

Discussion

Summary and implications of findings

As a result of the growing internet-based businesses, more and more products have to be sent to the home of the consumers. These products have to be packed in protective material, in a way that it arrives undamaged to the consumer. However, these products are often excessively packed. In a lot of these cases, products are packed in boxes much larger than the size of the actual product and the leftover space is filled with air-bags, shrink wrap or bubble wrap. The use of these extra materials are bad for the environment, as packaging materials are not sustainable in the long-term. More and more consumers have realized that their purchase behavior has a negative influence on the environment. Eco-friendliness is the trend nowadays and consumers are therefore increasingly striving for green packaging.

This experiment is the only one that investigates the consumer's retailer perception after an online product has been received, that was either excessively or minimally packed. Past studies have looked at retailer perception in other situations than packaging (Fiore et al., 2005, Barone et al., 2005) and have investigated how consumers value environmentally friendly packagings (Hao et al., 2019, Rokka & Uusitalo, 2008). However, no research has been done about how the (excessive) packaging of products influences their perception of the retailer, after they have received their online ordered package. The main question for this study was: *'What is the effect of excessive packaging on the consumers' perception of the retailer?'* An experiment with one manipulated factor was conducted. The packaging was manipulated, which was minimal or excessive. It was found that the main effect of the packaging condition is significant. This shows that an excessively packed product in general leads to a more negative retailer perception than a minimally packed product. This is in line with the theory as consumers are more and more concerned about the environment and the impact of their consumption on it (Lee & Yun, 2015). Consumers are changing their behavior to a more 'green consumption' behavior and have an

increased consciousness of the packaging (Perera et al., 2016, Stolz et al., 2013). Consumers are therefore demanding more environmentally-friendly packaging and reduced packaging material (Rundh, 2005). This result is also in line with the fact that people have negative beliefs about excessive packaging (Egaaied-Gambier, 2016). The negative beliefs that a consumer gets by getting an excessively packed product, can also leave a negative perception of the retailer. It has also been investigated if the score on biospheric values has an influence on the retailer perception. The results of the experiment show that there is a significant effect of biospheric values on the retailer perception in the minimal packaging condition, but not in the excessive packaging condition. This is not in line with what was expected. It was expected that people who are highly environmentally concerned, will perceive the retailer as more negative when the products are excessively packed than people who are not. The reason for this expectation was that people are increasingly concerned about the environmental problems (Lee & Yun, 2015). Also, theory showed that there is a relationship between biospheric values and environmental self-identity (Van der Werff et al., 2013). Therefore, it was expected that high biospheric values would have a negative effect on the retailer perception, as those people would see excessive packaging as something negative. Apparently, a difference in retailer perception is not a result of the score on biospheric values in the excessive packaging condition. An explanation for this could be that in the minimal packaging condition there were many more people who cared a lot about the environment than in the excessive packaging condition.

Theoretical implications

The results of this study have implications for the field of consumer psychology. Past studies have investigated how consumers value environmentally friendly packagings (Rokka and Uusitalo, 2008; Rundh, 2005; Hao et al., 2019). However, little to no research has been done about how the (excessive) packaging of products influences their perception of the retailer. This study has proved that excessive packaging leads to a more negative retailer perception

than minimal packaging. It contributes to the existing knowledge about how consumers value packagings and it gives new information about the thoughts of consumers when they receive their package home. This helps to understand consumers better. It also contributes to the economical field, as this information is helpful for companies as well. It adds to the existing knowledge about how to attract and retain consumers (Wallace et al., 2014)

Practical implications

The knowledge that has been gained with this current study can be useful for companies to apply. In particular, companies who are active on online websites, like for example the Dutch company Bol.com. For a company these days, it is hard to distinguish itself from others. Due to the growing internet business, there is increased competition between companies. Consumers can easily switch to another company, without having any costs. When they are not satisfied about a company, they can easily buy it the next time at another online retailer. It is therefore important to know for companies how their customers perceive them. These outcomes may be reason for change and as a result the consumer will perceive the retailer more positively. The consumer will therefore be more satisfied and thus might not switch to another online retailer. At the moment the consumer receives their package, it is the first moment the consumer and retailer actually physically meet each other. Seeing the packaging can leave an important impression about the retailer. With the results of this study that excessive packaging leads to a more negative retailer perception, companies maybe will adapt their packaging techniques. As it is important for companies to satisfy their customers, not using excessive packaging anymore can contribute to that. The reduction of packaging materials can be seen as something positive for the environment, but maybe as well for the company itself as the minimization of material can minimize costs as well.

Limitations and future research

There are some limitations for this research concerning the experiment. First of all, the experiment has been done with the use of a phone charger adapter, which is a non-fragile

product. There is a possibility that the retailer would have been evaluated differently when a fragile product was used. Adding a fragile product to the different packaging conditions could have gained more insights. Therefore, this is a recommendation for future research as well. Secondly, the experiment has been done using an online survey. This has the advantage that you can reach a lot of people in a short amount of time. Unfortunately, this makes the experience of receiving a packaging less real as there are only photos. In this way, doing a real experiment where people can see and feel the packaging in real life could perhaps gain some different or more powerful results.

Future research could focus more on the use of different packaging materials and products. It could be the case that people react differently on other products. Furthermore, it would be interesting to know where the boundary lies between a positive retailer perception and a negative retailer perception. When is a product too excessively packed so that the retailer is not evaluated positive anymore? In this research, just two extremes have been tested. Future studies could test all the sorts of packaging that lie in between to investigate the turning point. Next to that, the result that went against the expectation could be further explored. No significant effect was found of the biospheric values on the retailer perception in the excessive packaging condition. Future research could investigate this further and possibly find out the cause for this result.

Concluding remarks

All in all, this study is a unique one. It found that an excessively packed product leads to a more negative retailer perception than a minimally packed product. This result shows some new insights that can be useful for companies to apply. The influence of a consumers' biospheric values has also been investigated. It was shown that there is a significant effect of biospheric values on the retailer perception in the minimal packaging condition, but not in the excessive packaging condition. This result gives reason for further research on the effect of biospheric

values on the retailer perception in terms of different (excessive) packagings. When these results will be applied, it can be the start of more awareness of excessive packaging and the reduction of it. This will result in less use of packaging materials and a more positive retailer perception. Ultimately, it will also contribute positively to the environmental problems of these days.

Appendix

Online survey

Informed Consent

Fijn dat u mee wilt doen aan dit onderzoek! Deze vragenlijst maakt deel uit van mijn onderzoek naar online retail verpakkingen.

Het invullen van de vragenlijst zal ongeveer 5 minuten duren. Er zijn geen goede of foute antwoorden, wilt u invullen wat als eerste bij u opkomt? Instructies voor het beantwoorden van de vragen zullen tijdens het invullen van de vragenlijst worden gegeven. Als deelnemer aan dit onderzoek blijft u geheel anoniem. Uw individuele data zullen alleen worden onderzocht door mij en mijn begeleider en zullen niet verstrekt worden aan derden. Er zijn geen risico's of voordelen verbonden aan het invullen van de vragenlijst. U kunt op ieder moment beslissen om te stoppen met invullen. Voor eventuele vragen kunt u contact opnemen met Jilke Wientjens (jilke.wientjens@wur.nl).

Door op 'ja' te klikken geeft u aan dat u bovenstaande hebt gelezen en ermee instemt.

Met vriendelijke groeten,
Jilke Wientjens
Wageningen University

- Ja
- Nee

Heeft u minimaal 1 keer iets online besteld en dit pakketje zelf geopend?

- Ja
- Nee

Uitleg over de foto's

U krijgt zometeen een tekst te lezen. Het is belangrijk dat u deze aandachtig leest en u inbeeldt dat deze situatie daadwerkelijk plaatsvindt. Daarna zullen er wat vragen gesteld worden.

Uw adapter van uw telefoon oplader is helaas een paar dagen geleden kapot gegaan. Omdat u deze elke dag nodig heeft om uw telefoon op te laden, besloot u gelijk om online een nieuwe te bestellen. Dit deed u bij een online winkel en u heeft het ook gelijk online betaald. Het pakketje wordt nu bij u thuis bezorgd. U neemt zelf het pakketje aan en opent hem. Het bestelde product voldoet aan uw verwachtingen. De volgende foto's laten zien hoe het pakketje er van de buitenkant uitzag, wat u zag toen u hem net opende, hoe het er vanbinnen uitzag en ook het pakketje zelf met alle inhoud ernaast. Kijk goed naar de volgende foto's.'

Foto's excessive

Foto 1:



Foto 2:



Foto 3:



Foto 4:



Foto's minimal

Foto 1:



Foto 2:



Foto 3:



Foto 4:



U heeft het pakketje van retailer X ontvangen en de foto's gezien van hoe het pakket eruitziet en is ingepakt.

Na het krijgen van deze bestelling, wat is uw houding tegenover deze retailer X?

Ongunstig 0 0 0 0 0 0 0 0 0 0 **Gunstig**
Negatief 0 0 0 0 0 0 0 0 0 0 **Positief**
Slecht 0 0 0 0 0 0 0 0 0 0 **Goed**

Hoe belangrijk vindt u de volgende stellingen?

	Totaal niet belangrijk							Extreem belangrijk
Respect hebben voor de aarde: harmonie met andere soorten	0	0	0	0	0	0	0	0
Eenheid met de natuur: passen in de natuur	0	0	0	0	0	0	0	0
Bescherming van het milieu: behoud van de natuur	0	0	0	0	0	0	0	0

	Totaal niet belangrijk						Extreem belangrijk
Voorkomen van vervuiling: bescherming van natuurlijke hulpbronnen	0	0	0	0	0	0	0

Ik vond de verpakking van de telefoon oplader:

Heel minimaal	Precies goed	Overmatig	Heel overmatig
0	0	0	0

Wat is uw geslacht?

- Man
- Vrouw
- Anders

Wat is uw leeftijd?

Dit waren alle vragen. Hartelijk dank voor het invullen van deze vragenlijst!

Dit onderzoek ging over de invloed van minimale of overdreven verpakkingen op de perceptie van de consument op de online retailer. Heeft u nog vragen of opmerkingen, laat het dan gerust hieronder achter.

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