

# Reducing Product Returns of High Involvement Experience Goods: The Influence of E-Retailers' Secondary Packaging

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The Influence of E-Retailers' Secondary Packaging

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## **Abstract**

When shopping online, pictures of products often appear different on computer screens. Therefore, there is a high probability that post-purchase products do not meet customers expectations, leading to product returns. Present study proposes that it may still be possible to trigger positive product attitudes for high involvement experience goods (e.g. jewelry, fashion, art) that post-purchase do not completely meet customers expectations, on the basis of packaging e-retailers use to ship products. This research suggests that packaging that expresses that the product fits with the identity of the customer, leads to a more positive packaging experience compared to blank packaging. Moreover, it is expected that packaging also leads to a more positive packaging experience compared to blank packaging, when it conveys that it contains the product the customer ordered. A more positive packaging experience may lead to a higher product attitude by triggering more holistic (global) processing of the product rather than pure systematic processing of different product attributes. This in turn may lead to reduced product returns. An online survey among five-hundred thirteen respondents from varying cultural backgrounds reveals that a higher product attitude led to reduced product returns. However, the findings suggest that product attitude was not influenced by the emotions triggered by packaging. Practical implications for e-retailers, limitations and recommendations for future research are discussed.

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## 1. Introduction

Due to the convenience and accessibility of the Internet, consumers nowadays actively engage in the online environment for shopping purposes (Solomon et al., 2013). In 2015, the Asian-Pacific region, North America and Western Europe were the largest e-commerce markets (E-commerce Europe, 2016a, 2016b). However, despite the popularity of online shopping, 30% of all products are returned (Invesp, 2016). This is problematic for e-retailers, since e-commerce is a low margin business (Guide et al. 2006; Kapner, 2014). E-retailers report that a 10% decrease in product returns increases profitability with more than 20% (Urbanke et al., 2015). Therefore, it is of essential importance to gain a profound understanding of how e-retailers can reduce product returns.

Consumers' motivation to return products stems mainly from products not meeting their needs (Lawton, 2008; Shulman et al., 2010). Online consumers use intrinsic and extrinsic cues to form expectations about products (Gregg & Walczak, 2008). Based on this, they determine which product will best fulfill their needs and therefore which product is the best option to purchase. Yet, intrinsic cues are often not available online. Consumers are not able to touch, smell, taste and fit products before purchasing (Ofek et al. 2011; Shulman et al. 2010). Consequently, consumers often use extrinsic cues such as price, brand and brand image to derive expectations about intrinsic cues (Gregg & Walczak, 2008). While customers might be able to experience intrinsic cues by photos or videos (Li et al., 2002), this may lead to wrong expectations because colors, textures and materials shown on computer screens usually do not match reality (Kamolrat & Phongsuphap, 2014). Therefore, it can be assumed that it is hard for consumers to determine if a product fulfills their needs (Hong & Pavlou, 2014). This may be a greater problem for experience goods (e.g. apparel, perfume, accessories, wines and cosmetics) than for search goods (e.g. software and electronics), because for experience goods full information can only be acquired by direct experience (Hong & Pavlou, 2014).

Since it is difficult to determine online if an experience good meets customer's needs, there is an increased chance that post-purchase these needs are not met. This might lead to negative product attitudes (Hong & Pavlou, 2014), and products returns (Powers & Jack, 2015). Based on rational choice theory, it can be expected that this concerns especially high involvement experience goods (e.g. jewelry, cosmetics, fashion, art, furniture and perfumes) (Lamb et al., 2008, p. 148; Mathis & Steffen, 2015). Due to its expensive nature, purchasing involves a financial risk (Clancy et al., 2006, p. 120). Experience goods also involve a social/psychological risk because, due to their conspicuous nature, may become tied to a person's identity (Murphy & Enis, 1986). When evaluating high involvement goods, people engage more in systematic processing by carefully examining product attributes (Aaker & Sengupta, 2000; Maheswaran & Chaiken, 1991; Petty & Cacioppo, 1986). Therefore, it is likely that post-purchase people are critical, and will return the product if it does not meet their needs.

In present research, it is proposed that e-retailers might still be able to trigger positive post-purchase attitudes for high involvement experience goods, and reduce product returns. Experience goods are often given by people as gifts (Porublev et al., 2009). Moreover, characteristic for gifts is that they are wrapped. Howard (1992) showed that a gift-wrap, due to repeated pairings with joyous events, triggers positive affect which in turn can positively bias recipient's attitude towards a gift.

A unique feature of e-retailers is that they package already packaged products in secondary packaging (de Hooze & Leliveld, 2016). This suggests that by developing secondary packaging as a gift-wrap, e-retailers might be able to trigger positive product attitudes. However, in the situation of receiving a gift-wrap people do not know the product inside, while when people receive secondary packaging they know the product. Research has shown that when people see a gift, they like receiver-congruent gifts (gifts reflecting the receivers' identity) and giver-congruent gifts (gifts reflecting the givers' identity) (Belk & Coon, 1993; Paolacci et al., 2015). Therefore, on the basis of receiver-congruency and giver-congruency it might be possible to trigger positive affect with

secondary packaging which may also positively influence customer's attitude towards high involvement experience goods, just like a gift-wrap.

In current research, positive emotions associated with receiving receiver-congruent gifts are triggered with secondary packaging by expressing that the product inside fits with the identity of the customer. This is called customer-congruent secondary packaging, and this is achieved by displaying customers' gender. People like giver-congruent gifts when other people purchase them. In the context of online shopping the customer is the one who purchased the product. Therefore, it is assumed that positive emotions can also be triggered with secondary packaging by expressing that the packaging contains the product the customer has 'given' himself/herself. This is achieved by displaying the product category that corresponds to the product inside, which is called product-congruent secondary packaging. As a result, the following research question is formulated: *What is the influence of customer-(in)congruent and product-(in)congruent secondary packaging on customers' product returns for high involvement experience goods?*

This study proposes that customer-(in)congruency and product-(in)congruency affect the secondary packaging experience, and that product attitude mediates the relation between secondary packaging experience and product returns. In addition, it is assumed that independent and interdependent self-construals play a role. People with independent self-construals view the self as being separate from others, while people with interdependent self-construals define the self in terms of their connectedness with others (Aaker & Schmitt, 2001). This results in distinct information processing tendencies (Marquez & Ellwanger, 2014). Since a specific information processing mode is used by people to achieve emotion-maintenance of positive emotions (Ashby et al., 1999), self-construals might moderate the relation between secondary packaging experience and product attitude. The roles of interdependency and independency are important, since they vary across cultures (Green et al., 2005). Therefore, this might lead to insights with regard to the effectiveness of reducing product returns in the main e-commerce regions on the basis of secondary packaging.



## **2. Theoretical Framework**

### **2.1 E-Retailers' Secondary Packaging and Secondary Packaging Experience**

#### *2.1.1 Secondary Packaging Experience*

A secondary packaging experience can be conceived as a specific type of customer experience. A customer experience refers to the internal and subjective responses of customers towards any direct contact (e.g. purchase, use or service) or indirect contact (e.g. advertising or reviews) with a company, and thus arises from the interactions between the customer, the product and/or the company (Gentile et al., 2007; Verhoef et al., 2009). When customers receive a secondary packaging from an e-retailer, it can be seen as an indirect form of contact between the customer and the e-retailer, and therefore as a customer experience.

Experiences are generally characterized as being exceptional in the sense that they leave a lasting memorable impression and engage people on a personal level (Ali & Omar, 2014). Therefore in present research, a secondary packaging experience is operationalized as a memorable and personal event based on internal and subjective responses which arise from the interaction between the customer and the secondary packaging. From now on the term packaging experience is used to refer to a secondary packaging experience.

According to Oliver et al. (1997), emotions are the primary characteristic that distinguishes customer experiences. More recent research has shown that more than 50% of any customer experience is being judged by customers on an emotional basis (Shaw, 2012). Therefore, it can be assumed that a packaging experience is primarily made-up of customers feeling emotions. This suggests that a positive packaging experience involves customers feeling positive emotions (e.g. feeling pleased, happy, contented or enjoyable), while a negative packaging experience concerns feeling negative emotions (e.g. feeling displeased, unhappy, disgusted and frustrated) (Reynolds & Beatty, 1999; Wong, 2004).

The emotional basis that characterize customer experiences, entail that key to establishing a packaging experience is the elicitation of emotions. Current research proposes that customer-congruent and product-congruent packaging lead to positive emotions, and thus a positive packaging experience. On the other hand, this study expects that customer-incongruent and product-incongruent packaging lead to negative emotions, establishing a negative packaging experience.

### *2.1.2 Customer-(in)congruency and Packaging Experience*

The assumption that customer-congruent packaging triggers positive emotions, while customer-incongruent packaging generates negative emotions, can be explained by the appreciation of receiver-congruent gifts.

Receiver-congruent gifts are gifts that match the tastes and desires of the recipient, and therefore are reflective of the receivers' identity (Paolacci et al., 2015). The appreciation of receiver-congruent gifts stems from people's need for identity-congruency regarding their actions, attitudes and other ways of expressing themselves, because they consider their identity to be stable over time (Guadagno & Cialdini, 2010; Paolacci et al., 2015). By giving receiver-congruent gifts, the receiver may feel recognition for what makes herself/himself unique and is likely to feel satisfied about the gift (Ruth et al., 1999; Sherry, 1983). Incongruency between recipients' self-identity and the identity expressed by the gift may lead to identity disconfirmation. As a result of the threatened ego, the recipient may feel dissatisfied with the gift (Ruth et al., 1999; Sherry, 1983).

In the context of online shopping, the customer can be regarded as the receiver. Therefore, it can be assumed that customers feel positive emotions when packaging expresses that the product inside fits with the identity of the customer, while customers will experience negative emotions when packaging conveys that the product does not fit with the identity of the customer. In present research, the fit/misfit with the identity of the customer is achieved with packaging displaying the gender identity of the customer, because gender is a fundamental part of a person's self-concept due

to the attached gender roles (Feiereisen et al., 2009). Customer-congruent packaging shows the gender of the customer, while customer-incongruent packaging displays a gender that does not correspond to the customer. Since customer experiences are primarily driven by feeling emotions (Shaw, 2012), and a packaging experience can be seen as a specific type of customer experience, the following hypothesis is derived:

*H1a:* Customer-congruent packaging generates a more positive packaging experience compared to blank packaging, while customer-incongruent packaging generates a more negative packaging experience compared to blank packaging.

### *2.1.3 Product-(in)congruency and Packaging Experience*

The proposition that product-congruent packaging leads to positive emotions, while product-incongruent packaging leads to negative emotions, can be supported on the basis of the appreciation of giver-congruent gifts.

Giver-congruent gifts are gifts that symbolize the identity of the giver. A study by Paolacci et al. (2015) demonstrated that recipients show a greater appreciation for gifts that match with the characteristics of the giver than for gifts that do not match with the giver. An explanation for this is that because people consider identities to be stable over time, they also have a need for identity-congruency with regard to the behaviours and attitudes of others (Berger & Heath, 2007; Paolacci et al., 2015). Therefore, they evaluate the expressions of others in relation to their identity.

Incongruency is regarded as a sign of being inauthentic, which is generally considered to be a negative trait (Sheldon, et al., 1997).

These findings suggest that people will feel positive emotions when they receive a giver-congruent gift, while they will experience negative emotions when they get a giver-incongruent gift. However, people like giver-congruent gifts when they are purchased by others. In the case of an

online purchase, the customer has bought the product himself/herself. Therefore, customers may feel positive emotions when the packaging expresses that it contains the product that the customer has 'given' to himself/herself. On the other hand, it can be assumed that customers will experience negative emotions when the packaging conveys that it contains a different product. In present study, the product (mis)fit is achieved with packaging by displaying a product category. Product-congruent packaging shows the product category that corresponds to the product inside. On the other hand, product-incongruent packaging displays the product category that does not fit with the product.

*H1b:* Product-congruent packaging generates a more positive packaging experience compared to blank packaging, while product-incongruent packaging generates a more negative packaging experience compared to blank packaging.

#### *2.1.4 Customer-congruency versus Product-congruency and Packaging Experience*

In current research, the positive emotions associated with receiver-congruent gifts are triggered by developing customer-congruent packaging on the basis of customer's gender identity. However, research with regard to receiver-congruent gifts suggests that receiver-congruency requires a sense of familiarity with and understanding of the identity of the recipient (Mauss, 1924). When buying a receiver-congruent gift, the giver should be aware of the unique characteristics, passions, needs and likes/dislikes of the recipient. Moreover, receiver-congruent gifts communicate the identity of the receiver as perceived by the giver. It is a projection of the givers' beliefs regarding the recipients' identity (Schwartz, 1967). Therefore, even if the giver is familiar with the recipient, there is still a probability that the identity that is communicated through the gift does not match with how the recipient actually views himself/herself. Consequently, this may lead to misunderstanding and misinterpretation on the side of the receiver, and thus the experience of negative emotions (Schwartz, 1967).

In the context of online shopping the e-retailers do not have a personal relationship with the customer. They have a limited understanding of the identity of the customer. They are only able to trigger a fit between the product and the identity of the customer on the basis of general customer information in their database, for example customers' age, gender, place of residence. In this study, it is assumed that gender is something that people think about as being closely connected to their identity. However, some might perceive gender, and the associated gender roles, as being more connected to their identity than others. Therefore, customer-congruent packaging has the probability to make some customers feel misunderstood, and may not always trigger positive emotions.

Product-congruent packaging displays the product category that corresponds to the product the customer has ordered. Since the customer has chosen the product, and people prefer information that correspond to their behaviour (Berger & Heath, 2007), it is likely that customers will also like it when packaging displays the associated product category. Therefore, it can be assumed that product-congruent packaging triggers more positive emotions compared to customer-congruent packaging. On the other hand, because it can be expected that they like product-congruent packaging more, they may also experience more negative emotions when they receive a product-incongruent packaging, compared to a customer-incongruent packaging. Since a packaging experience results from feeling emotions (Shaw, 2012), the following hypotheses can be defined:

*H2a:* Product-congruent packaging triggers a more positive packaging experience compared to customer-congruent packaging.

*H2b:* Product-incongruent packaging triggers a more negative packaging experience compared to customer-incongruent packaging.

## **2.2 Packaging Experience and Product Attitude**

Generally, the term attitude refers to individuals' positive or negative evaluative judgment regarding people, objects, activities or other aspects in the environment, which is relatively stable over time (Alsamydai et al., 2015). A variety of researchers state that an attitude consists of two components; an affective component (emotional reactions) and a cognitive component (thoughts, beliefs and ideas) (Dube et al., 2003; Putrevu & Lord, 1994; Smith & Reynolds, 2009). Since an attitude is partly based on the experience of emotions, when packaging triggers emotions, these emotions may also influence people's attitude towards the product. However, an attitude also has a cognitive component. Therefore, to know how emotions triggered by packaging influence people's product attitude, it is important to gain an understanding of how cognitive beliefs are formed, and how emotions can influence this process.

Dual processing theory states that two information processing styles lie at the heart of the formation of cognitive beliefs: system 1 and system 2 processing (Epstein et al., 1996). System 1 can be described as heuristic/holistic processing of information (McElroy & Seta, 2003). This is an intuitive, effortless and automatic processing mode of information (Kahneman, 2003). Rather than engaging in detailed processing of the stimulus (e.g. a product) to form judgments about stimuli, information is processed in a non-analytic and less deliberate way by processing the separate cues as a unified whole (Chen et al., 1999). System 2 is a systematic/analytic processing style. Rather than a global processing of stimuli, this processing style involves detailed, deliberate, effortful and controlled analysis of information (Fujita et al., 2008; McElroy & Seta, 2003). According to research, these two processing systems can be seen as forming two poles on a continuum ranging from global/automatic to detailed/deliberate information processing (Bohner et al., 1995).

Research has shown that emotions play an important role in how cognitive information is processed (Isen, 2001; Grichnik et al., 2010; Schwarz & Clore, 2003). One explanation for this relation can be given on the basis of the emotion-maintenance/emotion-repair hypothesis. The

emotion-maintenance/emotion-repair hypothesis asserts that people that experience a positive emotional state will try to maintain these emotions, while people that are in a negative emotional state will try to restore these negative emotions (Carver, 2003). Positive affect communicates the message that a situation is safe and unproblematic, and therefore signals that no action have to be taken (Isen, 2001). Consequently, in order to maintain the positive state, people are likely to avoid investing cognitive effort (Ashby et al., 1999; Isen et al., 2004). Instead of elaborate systematic/analytic processing, they engage in low-effort heuristic/holistic processing (Bless et al., 1996; Schwarz & Clore, 1996). On the other hand, negative affect signals that something is wrong/problematic or unsafe, and therefore people want to get rid of/reduce their negative state (Schwarz & Clore, 2003). Consequently, they will put more cognitive effort and process information in a systematic/analytical way, because this information processing style is better suited to handle threatening situations (Loken, 2006).

It can be assumed that a packaging that triggers negative emotions, will result in negative emotions during unpacking. Based on the concept of emotion-repair, it can be expected that customers want to get rid of the negative emotions and will engage in systematic/analytic processing of the product inside. Customers may carefully examine the different attributes of a product and compare these with the expectations that were formed while shopping online. When the product is different than it looked online, it seems likely that on the basis of systematic/analytic processing customers will not be able to switch-off/diminish negative emotions that were triggered by the packaging. As a result, the combination of negative emotions and the belief that the product is not as expected, will likely lead to a negative product attitude.

Based on emotion-maintenance, it can be assumed that when a packaging triggers positive emotions, customers feel positive emotions when they unpack the packaging and want to maintain these emotions. Therefore, they may engage in heuristic/holistic processing of the product inside. Rather than strict systematic processing of product attributes, they may approach the product more

globally and be less critical. Since an attitude consists of a cognitive and an affective component (Smith & Reynolds, 2009), the combination of positive emotions and the belief that the product as a whole looks more or less like the product they ordered online, is likely to result in a positive product attitude. Given that a customer experience such as a packaging experience is primarily based on the experience of emotions (Shaw, 2012), the following hypothesis is formulated.

*H3:* A more positive packaging experience leads to a higher product attitude, while a more negative packaging experience leads to a lower product attitude.

### **2.3 The Moderating Influence of Independent and Interdependent Self-construals**

The emotion maintenance/emotion repair hypothesis suggests that people who experience positive emotions want to maintain those emotions and therefore engage in superficial holistic/heuristic processing (Carver, 2003). In contrast, people that feel negative emotions want to get rid of it, and therefore exert effort to reduce/eliminate their negative state by deep systematic/analytic information processing. A packaging that triggers positive emotions may therefore lead to customers processing the product inside the packaging holistically/heuristically, while a packaging that triggers negative emotions may lead to systematic/analytic processing of the product.

Research has shown that self-construals, which can be described as the way in which people think about and experience themselves (Aaker & Schmitt, 2001), influence their information processing tendencies (Cheek & Norem, 2016). With regard to self-construals, a distinction can be made between independent self-construals and interdependent self-construals (Aaker & Schmitt, 2001). People are not one or the other, but people vary in the degree in which they view themselves as either more independent or more interdependent (Schimmack, et al., 2005). People who have more independent self-construals, view themselves as autonomous and unique (Agrawal & Durairaj, 2005). As a result, they are likely to think more systematically/analytically



(Nisbett et al., 2001; Haberstroh et al., 2002). When making judgements of stimuli, they analyse the features individually and thus have a smaller focus. On the other hand, people with more interdependent self-construals, see themselves as being connected with others (Agrawal & Durairaj, 2005). When making judgements, they have a broader focus by considering the features of a stimulus as a whole rather than focussing on specific elements, and therefore tend to process information more heuristically/holistically (Choi et al., 2007; Haberstroh et al., 2002).

*H3* stated that a positive packaging experience leads to a higher product attitude because it triggers heuristic/holistic processing, while a negative packaging experience leads to a lower product attitude because it triggers a systematic/analytic processing mode. Since research suggests that the tendency to process information heuristically/holistically is stronger for people with more interdependent self-construals, while people with a more independent self-construal tend to process information more systematically/analytically (Haberstroh et al., 2002), the following hypothesis is distinguished:

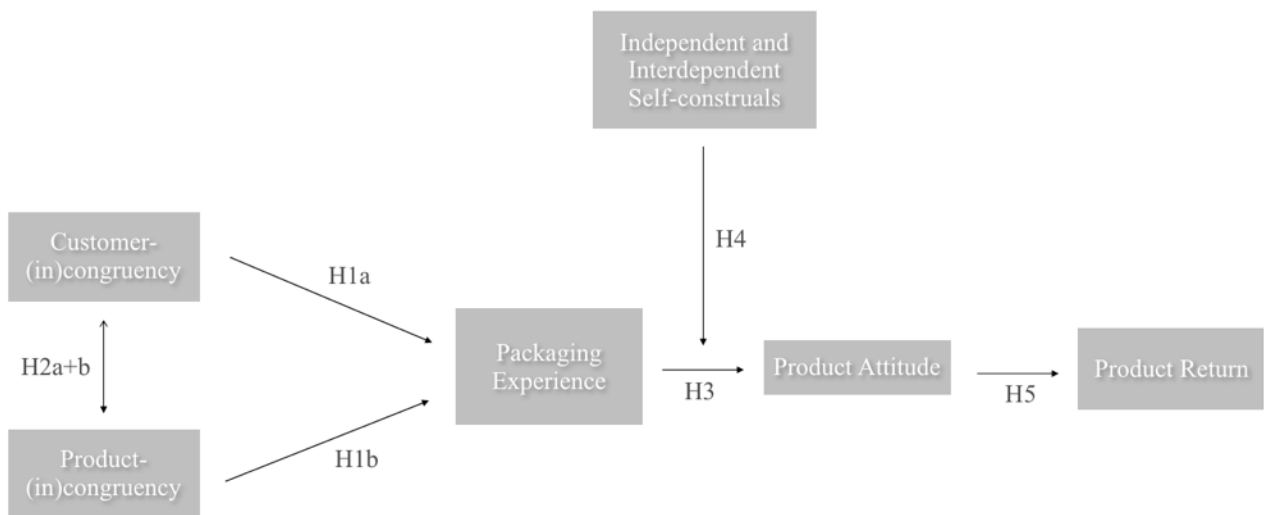
*H4:* The positive relation between a positive packaging experience and product attitude is stronger for individuals with higher scores on interdependent self-construal compared to individuals with lower scores on interdependent self-construal, while the negative relation between a negative packaging experience and product attitude is stronger for individuals with higher scores on independent self-construal compared to individuals with lower scores on independent self-construal.

## **2.4 Product Attitude and Product Return**

Research has revealed that dissatisfaction and disappointment in the post-purchase process increase the probability of product returns, while satisfaction reduces the chance that people return products (Powers & Jack, 2015). Liljander & Strandvik (1997) state that satisfaction includes an affective

component as well as a cognitive component. Moreover, research suggests that satisfaction can be seen as an attitude since satisfaction, just like attitude, involves an evaluative orientation (Czepiel & Rosenberg, 1977). In addition, once people have formed their attitude concerning a certain matter, these attitudes are not likely to change (Sherif & Cantril, 1947). It can be assumed that people that have formed a positive attitude regarding a product will feel satisfied and therefore decide to not return the product. On the other hand, people that have formed a negative attitude, are likely to feel dissatisfied and decide to return the product. This has led to the formulation of the following hypothesis:

*H5:* A higher product attitude reduces product returns, while a lower product attitude increases product returns.



*Figure 1.* Conceptual Model.

### 3. Methodology

#### 3.1 Participants and Design

A questionnaire was administered to collect the data. The respondents were recruited on the basis of a convenience sampling method. They were informed that by joining the study, they would have a chance to win one of ten €10 gift-cards. In total five-hundred thirteen respondents participated (202 males and 311 females,  $M_{age} = 29.5$ ,  $SD_{age} = 10.8$ ). To achieve variance in self-construals, it was ensured that the sample consisted of people with varying cultural backgrounds (294 Western-European, 77 Eastern-European, 23 North-American, 39 South-American, 57 Asian, 23 other).

To conduct the study, a between-subjects design with 5 groups was used. Participants were randomly assigned to either customer-congruent packaging, customer-incongruent packaging, product-congruent packaging, product-incongruent packaging, or to the control group (blank packaging). *Packaging Experience*, *Product Attitude*, *Product Return Intention* and *Product Return Choice* were used as dependent variables, and *Independent Self-construal* and *Interdependent Self-construal* as moderating variables.

#### 3.2 Variables and Procedure

A questionnaire was developed to examine if packaging could trigger customers to not return a high involvement experience good that post-purchase appeared to be different than what was expected. Framed art paintings were chosen to represent the category high involvement experience goods. In the questionnaire, respondents were first shown seven pictures of framed art paintings. They were asked to imagine themselves to shop for an art painting in a webstore and to select the art piece they would purchase. By making respondents choose between seven framed art paintings with different painting styles, and thus offering them some choice, it was tried to make sure that they could at least find a framed art painting that they would like to some extent.

After making their purchase decision, the respondents were randomly assigned to one of the five groups. In each group, respondents were shown a different packaging. Each packaging was a large envelope from paper with a strip wrapped around it. In the customer-congruent group, the strip on the packaging displayed the gender that matched with the customer, while in the customer-incongruent group the strip showed the gender that did not correspond to the customer. In the product-congruent group, the strip on the packaging displayed a picture of the product category that corresponded to the product inside. A picture of photo frames was used to refer to the product category art. In the product-incongruent group, respondents were presented with a packaging provided with a strip that showed a product category that did not correspond to the product inside; a picture of kitchen tools. Respondents assigned to the control group were shown packaging with a blank strip wrapped around it. Pictures of the different packagings are shown in Appendix B.

In each group, respondents were asked to look carefully at the packaging. They had to indicate on 7-point scaled items consisting of 9 negative emotions and 9 positive emotions to what extent they experienced them (1 = *not at all*, 7 = *very strongly*). The items were based on a study by Richins (1997). A Factor analysis revealed a factor with positive emotions (e.g. happy, thankful, touched) and a factor with negative emotions (e.g. disappointed, sad, ashamed), with eigenvalues of 4.93 and 6.06, and an explained variance of 61.0% (see Appendix A for the items and factor loadings). The factor with positive emotions was called *Positive Packaging Experience* and the factor with negative emotions *Negative Packaging Experience*. Both scales showed very high internal consistency, as measured with Cronbach's alpha (9 items,  $\alpha = .90$  and 9 items,  $\alpha = .91$ ).

After giving their packaging experience, respondents were told and shown that the colors of the art piece that they actually received, were slightly different from the picture they used in the first question to make their choice. In this way it was triggered that the painting they received was different than what they expected. They were asked to give their attitude about the framed painting. This attitude was measured with a *Product Attitude* scale developed by Holbrook & Batra (1987).

The scale was comprised of bipolar items that had to be rated on a 7-point scale (e.g. good/bad, positive/negative). Factor analysis suggested a one-factor solution. This factor had an eigenvalue of 3.58 and accounted for 89.4% of the variance in responses. Cronbach's alpha showed that the items formed a reliable scale (4 items,  $\alpha = .96$ ).

With the questions that followed, product returns were measured. Respondents were first asked about their intention to return the framed painting to the webstore. They were informed that sending it back would cost €2.99. By choosing this low value, it was tried to make sure that a decision to not return the product was not based on the return costs. In this way the influence of the emotions triggered by the packagings on product return was isolated as much as possible. For measuring *Product Return Intention* a 7-point scale was used (1 = *extremely unlikely*, 7 = *extremely likely*). In addition, respondents had to indicate if they would return the product or not. *Product Return Choice* was measured with a nominal level question (1 = *yes*, 2 = *no*).

After these questions, respondents were shown 10 items measuring independent and interdependent self-construals. They had to indicate on a 7-point scale to what extent they agreed with different statements (1 = *strongly disagree*, 7 = *strongly agree*). The items were adapted from a short version of the self-construal scale from Singelis (1994), developed by D'Amico & Scrima (2016). *Independent Self-construal* was measured with statements such as "I prefer to be direct and forthright when dealing with people I've just met" and "I act the same way no matter who I am with". Statements belonging to *Interdependent Self-construal* included "I will sacrifice my self interest for the benefit of the group I am in" and "My happiness depends on the happiness of those around me". Factor analysis revealed a two-factor solution, with eigenvalues of 2.29 and 1.99 and an explained variance of 42.8%. The factors were called *Independence* and *Interdependence*. Cronbach's alpha showed that the scales were moderately reliable (5 items,  $\alpha = .68$  and 5 items,  $\alpha = .62$ ). For both scales, deletion of an item did not increase reliability substantially.

The final part of the questionnaire consisted of some questions concerning demographic information. In addition, manipulation-check questions were asked to gain insight into how respondents interpreted the independent variable. Respondents were asked whether they thought the packaging fitted with their identity (identity-fit), and whether the packaging fitted with the product (product-fit). At the end of the questionnaire, respondents were thanked for their participation and were given the opportunity to give remarks. A full version of the online survey can be found in Appendix B.

## 4. Results

### 4.1 Manipulation Checks

Paired samples t-tests showed that the manipulation worked. Respondents that were shown the customer-congruent packaging indicated that the packaging fitted more with their identity than with the product ( $M = 3.19$ ,  $SD = 0.18$  vs.  $M = 2.05$ ,  $SD = 0.15$ ,  $t(102) = 6.82$ ,  $p < .001$ , mean difference = 1.14,  $-1.48 < 95\% \text{ CI} < -0.81$ , Cohen's  $d = 6.88$ ). The reverse was true for the respondents that saw the product-congruent packaging. Respondents perceived the packaging as fitting more with the product than with their identity ( $M = 4.81$ ,  $SD = 0.16$  vs.  $M = 3.80$ ,  $SD = 0.16$ ,  $t(96) = 6.04$ ,  $p < .001$ , mean difference = 1.01,  $-1.22 < 95\% \text{ CI} < -0.52$ , Cohen's  $d = 6.31$ ).

In addition, post-hoc tests revealed that respondents that saw the customer-congruent packaging were of the opinion that the packaging fitted more with their identity than the respondents that were shown the customer-incongruent packaging. This effect was significant ( $M = 3.19$ ,  $SD = 1.84$  vs.  $M = 2.27$ ,  $SD = 1.63$ ,  $F(413.3) = 15.29$ ,  $p < .001$ , mean difference = 0.92,  $0.47 < 95\% \text{ CI} < 1.38$ , Cohen's  $d = 0.53$ ). Respondents that were exposed to product-congruent packaging thought that the packaging fitted significantly more with the product compared to the respondents that saw the product-incongruent packaging ( $M = 4.81$ ,  $SD = 1.55$  vs.  $M = 1.96$ ,  $SD = 1.54$ ,  $F(413.3) = 81.05$ ,  $p < .001$ , mean difference = 2.85,  $2.42 < 95\% \text{ CI} < 3.28$ , Cohen's  $d = 1.84$ ).

### 4.2 Secondary Packaging and Positive Packaging Experience

A one-way ANOVA on positive packaging experience was performed with packaging as independent variable, consisting of five groups (customer-congruent packaging, customer-incongruent packaging, product-congruent packaging, product-incongruent packaging and blank packaging). There were significant differences between the groups on positive packaging experience ( $F(4, 508) = 6.08$ ,  $p < .001$ ).

Respondents that saw the blank packaging did not differ in their experience of positive emotions compared to the four other groups combined ( $t(508) = 0.76, p = .45$ ). A separate comparison of blank packaging with each of the other four packagings showed that respondents that saw the blank packaging liked the packaging significantly more compared to those exposed to the customer-congruent packaging ( $M = 3.12, SD = 1.45$  vs.  $M = 2.61, SD = 1.33, t(508) = 2.61, p = .01$ , mean difference = 0.51,  $2.82 < 95\% CI < 3.41$ , Cohen's  $d = 0.37$ ). Moreover, there was a marginally significant difference between the respondents that saw the blank packaging and the ones that saw the customer-incongruent packaging. Specifically, people that were shown the blank packaging were more positive about the packaging than those that were presented with customer-incongruent packaging ( $M = 3.12, SD = 1.45$  vs.  $M = 2.76, SD = 1.32, t(508) = 1.80, p = .07$ , mean difference = 0.36,  $2.82 < 95\% CI < 3.41$ , Cohen's  $d = 0.26$ ). There was no significant difference in the experience of positive emotions between product-congruent packaging and blank packaging ( $M = 3.43, SD = 1.41$  vs.  $M = 3.12, SD = 1.45, t(508) = 1.61, p = .11$ , mean difference = 0.31,  $3.15 < 95\% CI < 3.72$ , Cohen's  $d = 0.22$ ). There was also no significant difference between those exposed to product-incongruent packaging and those that saw blank packaging,  $t(508) = 0.37, p = .71$ .

In contrast to the first part of *H1a*, customer-congruent packaging did not generate a more positive packaging experience compared to blank packaging. Respondents that were shown product-congruent packaging were also not significantly more positive about the packaging than those that saw blank packaging. Therefore, no clear support for the first part of *H1b* was found.

Product-congruent and product-incongruent packaging were liked significantly more compared to customer-congruent and customer-incongruent packaging ( $M = 3.43, SD = 1.41$  and  $M = 3.19, SD = 1.36$  vs.  $M = 2.61, SD = 1.33$  and  $M = 2.76, SD = 1.32, t(508) = 4.67, p < .001$ ). There were no significant differences in the experience of positive emotions between the product-congruent packaging and the product-incongruent packaging ( $M = 3.43, SD = 1.41$  vs.  $M = 3.19, SD = 1.36, t(508) = 1.28, p = .20$ , mean difference = 0.24,  $3.15 < 95\% CI < 3.72$ , Cohen's  $d = 0.17$ ).



Customer-congruent packaging and customer-incongruent packaging also did not significantly differ from each other ( $t(508) = 0.84, p = .40$ ).

A comparison of both congruent packagings (product-congruent and customer-congruent packaging) with both incongruent packagings (product-incongruent and customer-incongruent packaging) revealed no significant differences in the experience of positive emotions ( $t(508) = 0.34, p = .74$ ). Respondents did like product-congruent packaging significantly more than customer-congruent packaging ( $M = 3.43, SD = 1.41$  vs.  $M = 2.61, SD = 1.33, t(508) = 4.28, p < .001$ , mean difference = 0.82,  $3.15 < 95\% \text{ CI} < 3.72$ , Cohen's  $d = 0.60$ ). This is in line with  $H2a$ , which stated that product-congruent packaging triggers a more positive packaging experience compared to customer-congruent packaging. Furthermore, it was shown that the people that saw product-incongruent packaging did evaluate the packaging as significantly more positive compared to those exposed to the customer-incongruent packaging ( $M = 3.19, SD = 1.36$  vs.  $M = 2.76, SD = 1.32, t(508) = 2.28, p = .02$ , mean difference = 0.43,  $2.92 < 95\% \text{ CI} < 3.45$ , Cohen's  $d = 0.32$ ).

In sum, these findings show that the respondents liked blank packaging more compared to both customer-congruent packaging and customer-incongruent packaging. Respondents were more positive about product-congruent packaging compared to customer-congruent packaging, and more positive about product-incongruent packaging than customer-incongruent packaging.

*Table 1.* Significant Differences between Groups on Positive Packaging Experience.

<i>Groups</i>		
Blank Packaging M (SD) 3.12 (1.45)*	Customer-Congruent Packaging M (SD) 2.61 (1.33)	Customer-Incongruent Packaging M (SD) 2.76 (1.32)
Product-Congruent Packaging M (SD) 3.43 (1.41)*	Customer-Congruent Packaging M (SD) 2.61 (1.33)	
Product-Incongruent Packaging M (SD) 3.19 (1.36)*	Customer-Incongruent Packaging M (SD) 2.76 (1.32)	

\* = significant difference

### 4.3 Secondary Packaging and Negative Packaging Experience

A one-way ANOVA on negative packaging experience with packaging as an independent variable with five groups (customer-congruent, customer-incongruent, product-congruent, product-incongruent and blank packaging) combined, revealed that there were marginally significant differences in the experience of negative emotions ( $F(4, 508) = 2.28, p = .06$ ). Blank packaging was also separately compared with each of the other four groups. The findings revealed that people were more negative about blank packaging than about product-congruent packaging, which was a marginally significant difference ( $M = 2.16, SD = 1.33$  vs.  $M = 1.82, SD = 1.13, t(508) = 1.89, p = .06$ , mean difference = 0.34,  $1.89 < 95\% CI < 2.44$ , Cohen's  $d = 0.28$ ). There were no significant differences in the experience of negative emotions when comparing blank packaging separately with product-incongruent, customer-congruent and customer-incongruent packaging (all  $t$ 's  $< 0.65$ , all  $p$ 's  $> .51$ ).

These findings are in contrast with the second part of *H1a*, which stated that customer-incongruent packaging generates a more negative packaging experience compared to blank packaging. The findings do also not support the second part of *H1b*, which asserted that product-incongruent packaging generates a more negative packaging experience than blank packaging.

There were marginally significant differences in the experience of negative emotions when comparing both product-congruent and product-incongruent packaging with both customer-congruent and customer-incongruent packaging ( $t(508) = 1.77, p = .08$ ). When comparing product-congruent packaging with product-incongruent packaging, there was a marginally significant difference; product-incongruent packaging was evaluated as more negative than product-congruent packaging ( $M = 2.26, SD = 1.25$  vs.  $M = 1.82, SD = 1.13, t(508) = 1.77, p = .08$ , mean difference = 0.44,  $2.02 < 95\% CI < 2.50$ , Cohen's  $d = 0.37$ ). There were no significant differences in the experience of negative emotions between customer-congruent packaging and customer-incongruent packaging ( $t(508) = 0.28, p = .78$ ).

A comparison of both congruent packagings with both incongruent packagings showed nearly marginally significant differences ( $t(508) = 1.59, p = .11$ ). People that were shown customer-congruent packaging were significantly more negative about the packaging than those that were asked to look at the product-congruent packaging ( $M = 2.28, SD = 1.24$  vs.  $M = 1.82, SD = 1.13$ ,  $t(508) = 2.60, p = .01$ , mean difference = 0.46,  $2.04 < 95\% \text{ CI} < 2.52$ , Cohen's  $d = 0.39$ ). There was no significant difference in the experience of negative emotions between customer-incongruent packaging and the product-incongruent packaging ( $t(508) = 0.15, p = .88$ ). Therefore, there was no support for *H2b* that product-incongruent packaging triggers a more negative packaging experience compared to customer-incongruent packaging.

In sum, the findings revealed that the negative packaging experience was significantly lower in the product-congruent group than in groups that saw product-incongruent, customer-congruent and blank packaging (see Table 2). The mean scores and standard deviations of positive and negative packaging experience for all groups can be found in Table 3.

*Table 2.* Significant Differences between Groups on Negative Packaging Experience.

<i>Groups</i>			
Product-Congruent Packaging M (SD) 1.82 (1.13)*	Product-Incongruent Packaging M (SD) 2.26 (1.25)	Customer-Congruent Packaging M (SD) 2.28 (1.24)	Blank Packaging M (SD) 2.16 (1.33)

\* = significant difference

*Table 3.* Means and Standard Deviations of Packaging Experience for All Groups.

<i>Groups</i>	Blank Packaging M (SD)	Customer-Congruent Packaging M (SD)	Customer-Incongruent Packaging M (SD)	Product-Congruent Packaging M (SD)	Product-Incongruent Packaging M (SD)
Positive Packaging Experience	3.12 (1.45)	2.61 (1.33)	2.76 (1.32)	3.43 (1.41)	3.19 (1.36)
Negative Packaging Experience	2.16 (1.33)	2.28 (1.24)	2.23 (1.32)	1.82 (1.13)	2.26 (1.25)

#### 4.4 Secondary Packaging and Product Attitude

A one-way ANOVA test on product attitude with packaging as an independent variable with five groups, revealed no significant difference in product attitude when comparing blank packaging with the other four groups combined ( $F(4, 508) = 1.80, p = 0.13$ ). When making a separate comparison between blank packaging and each of the other four packagings, there were also no significant differences (all  $t$ 's  $< 1.59$ , all  $p$ 's  $> .11$ ).

When comparing both product-congruent and product-incongruent packagings together with customer-congruent and customer-incongruent packagings, there were no significant differences in product attitude ( $t(508) = 0.09, p = .93$ ). The findings did show that respondents that were exposed to product-congruent packaging had a significantly higher product attitude compared to those that were shown the product-incongruent packaging ( $M = 4.84, SD = 1.68$  vs.  $M = 4.24, SD = 1.58$ ,  $t(508) = 2.58, p = .01$ , mean difference = 0.60,  $4.50 < 95\% \text{ CI} < 5.18$ , Cohen's  $d = 0.37$ ). The product attitude was not significantly different between the respondents exposed to customer-congruent packaging than those that were presented with customer-incongruent packaging ( $t(508) = 0.58, p = .56$ ).

A comparison of both congruent packagings with both incongruent packagings revealed that there were significant differences in product attitude ( $t(508) = 2.26, p = .03$ ). People that saw the product-congruent packaging had a higher product attitude than those who saw the customer-congruent packaging ( $M = 4.84, SD = 1.68$  vs.  $M = 4.59, SD = 1.56$ ), but this difference was not significant ( $t(508) = 1.06, p = .29$ ). Product attitude did also not significantly differ between the respondents exposed to the customer-incongruent packaging and those that were shown the product-incongruent packaging ( $t(508) = 0.98, p = .33$ ).

In sum, product attitude was significantly higher for the people that were shown product-congruent packaging compared to those that saw product-incongruent packaging. Table 4 shows the means and standard deviations for all groups.

Table 4. Means and Standard Deviations of Product Attitude for All Groups.

Groups	Blank Packaging M (SD)	Customer-Congruent Packaging M (SD)	Customer-Incongruent Packaging M (SD)	Product-Congruent Packaging M (SD)	Product-Incongruent Packaging M (SD)
Product Attitude	4.61 (1.75)	4.59 (1.56)	4.46 (1.73)	4.84 (1.68)	4.24 (1.58)

#### 4.5 Secondary Packaging and Product Return Intention / Product Return Choice

A one-way ANOVA on product return intention and packaging with five groups as independent variable, showed a marginally significant difference between the respondents exposed to blank packaging compared to the other four groups combined ( $F(4, 508) = 2.03, p = .09$ ). A separate comparison of blank packaging with each of the other groups revealed no significant differences (all  $t$ 's  $< 1.49$ , all  $p$ 's  $> .14$ ).

When taking together product-congruent and product-incongruent packaging and comparing it to customer-congruent and customer-incongruent packaging combined, there were no significant differences in product return intention ( $t(508) = 0.99, p = .32$ ). There were significant differences in product return intention between the respondents that were shown the product-incongruent packaging and those that were exposed to the product-congruent packaging. In this regard the findings showed that people that were shown the product-incongruent packaging had a higher intention to return the product compared to those that were shown the product-congruent packaging ( $M = 3.11, SD = 1.90$  vs.  $M = 2.49, SD = 1.61, t(508) = 2.47, p = .01$ , mean difference = 0.62,  $2.75 < 95\% \text{ CI} < 3.48$ , Cohen's  $d = 0.35$ ). There were no significant differences in product return intention between the respondents that saw customer-congruent packaging and the ones that saw customer-incongruent packaging ( $t(508) = 0.75, p = .46$ ).

Comparisons between both congruent packagings with both incongruent packagings revealed no significant differences in product return intention ( $t(508) = 1.25, p = .21$ ). The product-

congruent packaging was also compared to the customer-congruent packaging in terms of product return intention, and the product-incongruent packaging to the customer-incongruent packaging. Respondents that were presented with the customer-congruent packaging had a stronger intention to return the product compared to respondents that were exposed to the product-congruent packaging ( $M = 3.07, SD = 1.78$  vs.  $M = 2.49, SD = 1.61, t(508) = 2.28, p = .02$ , mean difference = 0.58,  $2.72 < 95\% CI < 3.42$ , Cohen's  $d = 0.34$ ). The findings did not reveal a significant difference in product return intention between people that saw product-incongruent packaging and people that saw customer-incongruent packaging ( $t(508) = 0.94, p = .35$ ).

Product Return Choice was measured with a categorical variable. A Pearson chi-square test showed that the scores did not significantly differ between the groups ( $\chi^2(4, N = 513) = 5.85, p = .21$ ) (see Figure 2).

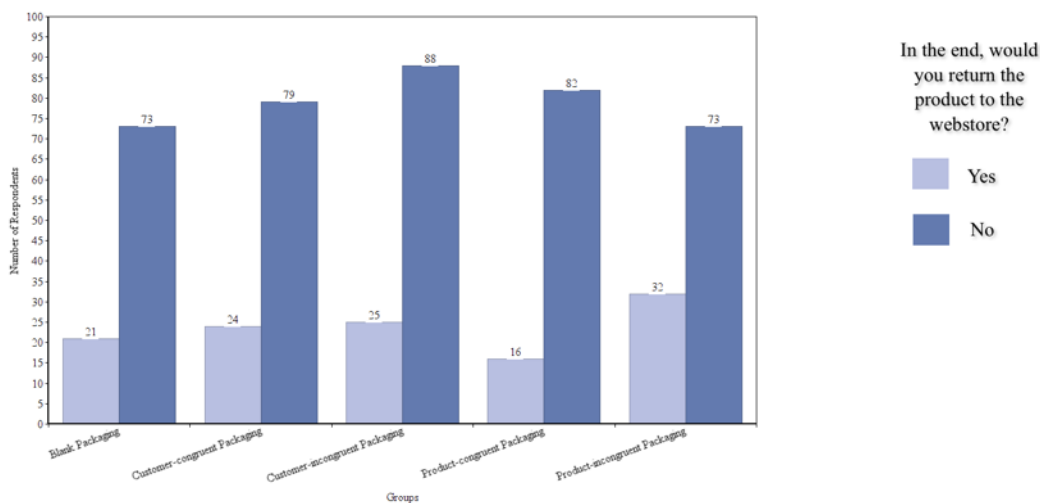


Figure 2. Product Return Choice in All Groups.

In sum, people that were exposed to product-congruent packaging had a significantly lower product return intention compared to those that saw product-incongruent and customer-congruent packaging. Table 5 provides an overview of the means and standard deviations for all five groups.

*Table 5. Means and Standard Deviations of Product Return Intention for All Groups.*

<i>Groups</i>	Blank Packaging M (SD)	Customer-Congruent Packaging M (SD)	Customer-Incongruent Packaging M (SD)	Product-Congruent Packaging M (SD)	Product-Incongruent Packaging M (SD)
Product Return Intention	2.73 (1.71)	3.07 (1.78)	2.88 (1.94)	2.49 (1.61)	3.11 (1.90)

#### **4.6 Packaging Experience, Self-Construals and Product Attitude**

To examine the influence of packaging experience on product attitude and the moderating role of self-construals, linear regression was performed. Model one examined the direct effects with positive packaging experience, negative packaging experience, independence and interdependence as predictors. In model two the predictors were combined with the interaction effects (positive packaging experience X interdependence and negative packaging experience X independence). First the variables were centered by subtracting the mean from the values of each variable, which leads to deviation scores with means of zero. In this way multicollinearity between the independent variables and the interaction terms can be avoided (Jaccard et al., 1990). Table 6 shows the regression coefficients of model one and model two.

The first model was not significant ( $F(4, 508) = 1.78, p = .13$ ). It explained 1.4% of the variance in product attitude. Adding the moderating variables in the second model did not significantly improve the predictive power of the model. Together the predictors explained 1.9% of the variance. This is a slight increase of 0.5%, which was not significant ( $F(2, 506) = 1.33, p = .27$ ). The positive relation between a positive packaging experience and product attitude was not stronger for individuals with higher scores on interdependence compared to individuals with lower scores on interdependence ( $B = 0.02, SE = 0.05, p = .75$ ). Moreover, the negative relation between a negative packaging experience and product attitude was also not stronger for individuals with higher scores on independence compared to individuals with lower scores on independence ( $B = 0.08, SE = 0.05, p = .12$ ). So the findings did not support *H4*.

Although model one was not significant, the variable positive packaging experience did significantly lead to a higher product attitude ( $B = 0.12$ ,  $SE = 0.05$ ,  $p = .03$ ). So the more positive people were about the packaging, the more they liked the product. However, a negative packaging experience did not result in a significantly lower product attitude ( $B = 0.04$ ,  $SE = 0.06$ ,  $p = .54$ ). This means that the more negative people were about the packaging, it made them not more negative about the product. Therefore,  $H3$  can only partly be confirmed.

*Table 6.* Summary of Linear Regression Analysis.

	Model 1			Model 2		
	B	SE B	$\beta$	B	SE B	$\beta$
(Constant)	4.543	.073		4.532	.074	
Positive Packaging Experience	.120	.054	.100	.116	.054	.098
Negative Packaging Experience	.036	.059	.027	.015	.061	.011
Independent Self- Construal	.063	.069	.041	.071	.069	.046
Interdependent Self- Construal	-.035	.074	-.022	-.037	.074	-.023
Positive Packaging Experience X Interdependent Self- Construal				.016	.049	.014
Negative Packaging Experience X Independent Self- Construal				.084	.053	.071

#### 4.7 Product Attitude and Product Return Intention / Product Return Choice

A Linear regression analysis with product return intention as dependent variable, and product attitude as predictor showed a significant regression equation ( $F(1, 511) = 52.75$ ,  $p < .001$ ,  $R^2 =$



0.094,  $R^2_{\text{adjusted}} = 0.092$ ). More specifically, for every unit increase in product attitude, people's intention to return the product reduces ( $B = -0.33$ ,  $t(511) = 7.26$ ,  $p < .001$ ).

A Binary logistic regression with product return choice as dependent variable and product attitude as predictor, revealed that product attitude significantly influenced product return choice ( $B = 0.35$ ,  $\text{Wald}(1) = 28.50$ ,  $p < .001$ ). The higher product attitude, the higher product return choice. Since product return choice was coded as 0 (yes) and 1 (no), the more respondents liked the product, the more they decided to not return the product. The more negative people were regarding the product, the more people made the decision to return the product. In line with *H5*, a higher product attitude reduces product returns, while a lower product attitude increases product returns.

#### 4.8 Summary Results

Customer-congruent packaging did not trigger a more positive packaging experience than blank packaging, but the reverse effect was true. With regard to negative packaging experience, there were no significant differences between blank packaging and customer-incongruent packaging. Based on these findings, *H1a* is rejected.

In contrast to *H1b*, product-congruent packaging did not generate a significantly more positive packaging experience than blank packaging. With regard to negative packaging experience, there were no significant differences between product-incongruent packaging and blank packaging. Therefore, no support was found for *H1b*. Confirmation was found for *H2a*, which stated that product-congruent packaging triggers a more positive packaging experience than customer-congruent packaging. In contrast to *H2b*, product-incongruent packaging did not trigger a more negative packaging experience than customer-incongruent packaging.

A positive packaging experience did lead to a higher product attitude, while a negative packaging experience did not lead to a lower product attitude. Therefore *H3* is only partly confirmed. No support was found for *H4*, which stated that the positive relation between a positive

packaging experience and product attitude is stronger for individuals with higher scores on interdependent self-construal compared to individuals with lower scores on interdependent self-construal, while the negative relation between a negative packaging experience and product attitude is stronger for individuals with higher scores on independent self-construal compared to individuals with lower scores on independent self-construal. In line with *H5*, the higher product attitude, the lower product return intentions and also actual product returns.

The findings further showed that people were more positive about blank packaging compared to customer-(in)congruent packaging. Product-congruent packaging was liked more than customer-congruent packaging and product-incongruent packaging was liked more than customer-incongruent packaging. However, overall people experienced relatively low positive emotions. Respondents that were presented with product-congruent packaging experienced significantly lower negative emotions compared to those that saw product-incongruent packaging, customer-congruent packaging or blank packaging. In all groups people did experience nearly no negative emotions.

Product attitude was significantly higher for the people in the product-congruent group compared to those in the product-incongruent group. Respondents that were exposed to product-congruent packaging had a significantly lower product return intention than those that saw product-incongruent and customer-congruent packaging. There were no significant differences in product return choice between the groups.

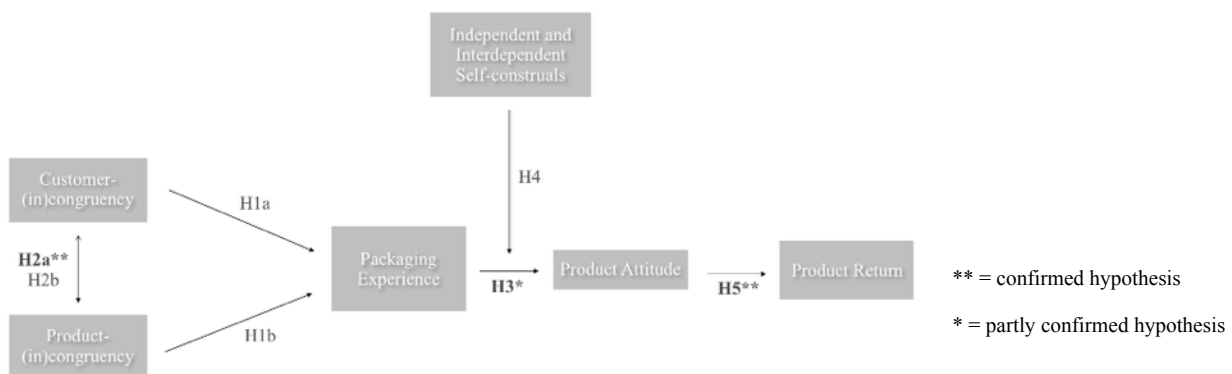


Figure 3. Conceptual Model.

## 5. Discussion & Conclusions

### 5.1 Theoretical Contributions

This study expected that packaging that expresses a fit between the product and the identity of the customer triggers positive emotions, while a misfit generates negative emotions. Moreover, it was assumed that packaging evokes positive emotions when it expresses that it contains the ordered product, and negative emotions when it conveys that it contains a different product.

In contrast with what was expected, people did not like customer or product-congruent packaging more than blank packaging. Moreover, people also were not more negative about customer or product-incongruent packaging compared to blank packaging. Since the manipulation check revealed that the manipulation worked, this suggests that people do not care about whether the packaging fits with their identity/the product or not. A reason could be that respondents had to make a choice between art paintings and were not able to freely choose a product. Therefore, they may have been not very positive about the product, but because they could choose between different paintings, not very negative. This may explain why they were also not very positive about packaging that expressed a fit with the product or their identity, and also not very negative about packaging that did not express this fit with the product or their identity. Another explanation for the finding that the congruent/incongruent packagings were not liked more/disliked more compared to blank packaging, may be the design of the packagings. The respondents may have not been aware of the customer/product (mis)fit, and only realized it when asked about it directly.

In line with what was expected, product-congruent packaging was liked more than customer-congruent packaging. This confirms the proposed reasoning that not all people would experience positive emotions with packaging that displays customers' gender, because it is quite general. Therefore, this suggests that for triggering positive emotions with customer-congruent packaging, it is important to use an identity that can more uniquely be ascribed to the customer. The

study further showed that product-incongruent packaging was not disliked more than customer-incongruent packaging. Both packagings triggered nearly no negative emotions. This may be explained on the basis of Isen (1984), who suggests that negative emotions, given its cognitive complexity, may be harder to evoke compared to positive emotions. A study regarding inducing affect with advertising by Allen, Machleit and Marine (1988) found confirmation for this.

All packagings triggered a relatively low experience of positive emotions. The findings did reveal that product-congruent packaging was liked more than customer-congruent packaging, and product-incongruent packaging more than customer-incongruent packaging. Blank packaging was preferred above customer-(in)congruent packaging. Moreover, a more positive experience did lead to a higher product attitude. While product attitude was higher for product-congruent packaging compared to product-incongruent packaging, it was not higher than blank packaging. This suggests that product attitude was not influenced by the positive emotions triggered by packaging.

The packagings evoked nearly no negative emotions. What was found with regard to negative packaging experience is that people were more negative about blank packaging, customer-congruent and product-incongruent than product-congruent packaging. Product attitude was only lower for product-incongruent packaging compared to product-congruent packaging. As a result, a more negative packaging experience did not lead to a lower product attitude.

The findings indicate that product attitude was not influenced by the emotions triggered by packaging. Since people were told and shown that the product was different than what they ordered, this may have promoted systematic processing (Aaker & Sengupta, 2000). People seek consistency between feelings and beliefs (Rosenberg, 1960). As a result, they may have adjusted their emotions towards their product beliefs. Since an attitude has an affective and a cognitive component (Smith & Reynolds, 2009), in this way the product attitude may have been formed.

The positive relation between positive packaging experience and product attitude, was not stronger for people who see themselves as more interdependent compared to those who see

themselves as less interdependent. Moreover, the negative relation between negative packaging experience and product attitude was not stronger for people with a more independent self-construal compared to those with a less independent self-construal. Since the findings suggest that the emotions triggered by packaging did not influence product attitude, packaging may have not triggered emotion-maintenance/emotion-repair, and therefore no holistic/heuristic processing or systematic/analytic processing. Since more interdependent individuals tend to engage in more holistic/heuristic processing, while more independent individuals in more systematic/analytic processing, this may explain why self-construals did not moderate the relation between packaging experience and product attitude. As a result, it can not be suggested that triggering positive emotions with packaging would more strongly lead to a higher product attitude for people in interdependent cultures (e.g. Asia, Eastern-Europe). In addition, there is also no indication that triggering negative emotions with packaging would have a greater probability of leading to a lower product attitude for people in independent cultures (e.g. United States, Western-Europe).

In line with the last hypothesis, the higher product attitude, the higher the chance that people do not intend to return. A higher product attitude may have led to satisfaction and in turn lower product return intentions. Product return intention was lower for product-congruent packaging compared to product-incongruent and customer-congruent packaging, however not lower than blank packaging. This suggests that the packagings did not influence the product return intention, and that the decision to not return was purely based on the product. This is confirmed by the finding that the packagings did not differ in the decision to actually return the product or not.

## **5.2 Practical Implications**

The findings suggest that in current study packaging did not affect product attitude, and as a result has not influenced product returns. However, there may be indeed a subtle influence of packaging on product attitude and product return when a larger sample is used and when the customer can

freely choose a product to purchase. Even though the influence may be subtle, online shopping concerns high volumes. Therefore, a small reduction in product returns has a large impact on profit margins (Urbanke et al., 2015). As a result, it is important that e-retailers examine the influence of packaging. They could for example make a list of products that are often returned. When a customer orders a product from this list, they could package it in either customer-(in)congruent, product-(in)congruent or blank packaging. By monitoring these packagings for a few years, it can be examined if there are differences in return rates between the packagings.

### **5.3 Limitations and Future Research**

In current research, consumers were only able to make a purchase selection between art paintings, and also a limited number. Therefore, they may have been not very positive/negative about the product, and therefore also did not experience very positive/negative emotions with the packagings. A future research should make sure that people truly like the product they selected, for example on the basis of a pre-test.

Another limitation is that the identity- and product (mis)fit was only achieved on the basis of gender and product category. It may be that an identity or product fit would have led to more positive emotions compared to blank packaging, and a misfit to more negative emotions than blank packaging, when packaging was developed in a different way. Identity-fit could for example be achieved by displaying a more personal identity. For example, showing age, name, the number of times the customer has ordered through the webstore or the products a person previously ordered. Product-fit may be realized by naming the product category, giving product information or showing a product picture/product users.

Present study explained the relation between packaging experience and product attitude by suggesting the roles of holistic and systematic processing. It was proposed that self-construals foster a specific processing style, and therefore, when a moderating influence was found, it could be

assumed that a specific processing style occurred. However, self-construals are not necessarily related with a specific cognitive style (Marquez & Ellwanger, 2014). Therefore, future research should measure processing style directly, for example with the scales from Creusen (1998).

Current research proposed that a positive packaging experience triggers more holistic processing and therefore slightly less systematic processing of the product, resulting in a higher product attitude. However, to know to what extent the higher product attitude is the result of holistic processing triggered by packaging, a future research should make sure that the product inside the packaging is in such a way different from the product ordered, that people would return it based on pure systematic processing.

Present study was performed with an online survey, which may have threatened internal validity. A future research should be performed in a lab. In a lab, participants are able to touch the packagings and this may lead to a different experience of emotions. Moreover, they are able to evaluate the product after opening by touching and seeing it directly, which could lead to a different product attitude. Finally, it can be ensured that people are only able to participate once.

While there was not found clear evidence that packaging can reduce product returns, current research does contribute to the lack of research dedicated to reducing product returns. Thus far, most research regarding reducing product returns primarily focused on the influence of product return policy measures (Yan & Cao, 2017). By examining the role of packaging, present research has made a unique contribution to the relatively unexplored field of research concerning product returns.

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## Appendix A: Factor Loadings

*Table A1.* Items and Factor Loadings of Packaging Experience

<i>Item</i>	Negative Packaging Experience	Positive Packaging Experience
1. Dissatisfied	0.90	
2. Angry	0.86	
3. Uncomfortable	0.85	
4. Disappointed	0.85	
5. Annoyed	0.85	
6. Sad	0.79	
7. Ashamed	0.68	
8. Nervous	0.62	0.18
9. Uncertain	0.56	
10. Delighted		0.88
11. Happy		0.87
12. Enthusiastic		0.86
13. Thankful		0.86
14. Satisfied		0.82
15. Amused		0.72
16. Touched	0.20	0.70
17. Curious		0.68
18. Surprised	0.22	0.48

*Note.* Items answered using 7-point scales, labeled from 1 (do not experience at all) to 7 (experience very strongly).



*Table A2.* Items and factor loadings of Product Attitude

<i>Item</i>	Product Attitude
1. Bad - good	0.95
2. Unfavorable - favorable	0.95
3. Dislike - like	0.94
4. Negative - positive	0.94

*Note.* Bipolar items answered using 7-point scales.

*Table A3.* Items and factor loadings of Self-Construals

<i>Item</i>	Independent Self-construal	Interdependent Self-construal
1. I act the same way no matter who I am with	0.73	
2. I prefer to be direct and forthright when dealing with people I've just met	0.71	
3. I act the same way at home as I do at school or work	0.65	0.22
4. I'd rather say "No" directly, than risk being misunderstood	0.61	
5. I do my own thing, regardless of what others think	0.57	-0.19
6. I often have the feeling that my relationships with others are more important than my own accomplishments		0.70
7. My happiness depends on the happiness of those around me		0.68
8. I will sacrifice my self interest for the benefit of the group I am in		0.64
9. I will stay in a group if they need me, even when I am not happy with the group		0.64
10. If my brother or sister fails, I feel responsible	0.18	0.45

*Note.* Items answered using 7-point scales, labeled from 1 (strongly disagree) to 7 (strongly agree).

## Appendix B: Online Survey

Welcome to this research!

In this research you are asked to imagine that you would like to purchase an art piece through a webstore. First, you will select a piece of art on the basis of pictures that are shown on the website. Then you are asked to evaluate the packaging after you received the art piece. You will randomly see one of five packagings. After that, you carefully open the packaging and see the art piece that you ordered. You then give your opinion about it.

Your responses are extremely valuable for my research, and they will be handled completely confidentially and anonymously. Your name will not appear anywhere and the answers you give in this questionnaire will never be linked to your name. Completing the survey will take approximately 5 minutes. By joining this study you will have a chance to win one of ten €10 gift-cards from a store of your choice.

By clicking on 'I AGREE', you confirm that you have read this text and that you have no further questions with regard to your participation in this research. Then you can click on "next" at the bottom of the page to start with the questionnaire.

Thank you in advance for your participation!

(1) I agree

(2) I disagree

1. Imagine that you just bought a new house. You are decorating your house, and you want to make your living room a bit more cosy. You decide to buy a painting in a frame for your living room at a webstore. The webstore sells products from different product categories, and delivers its products at your home for free. You carefully look at the pictures online. In this situation, which framed painting would you buy for your living room? Please select the painting of your preference.



(1)



(2)



(3)



(4)



(5)

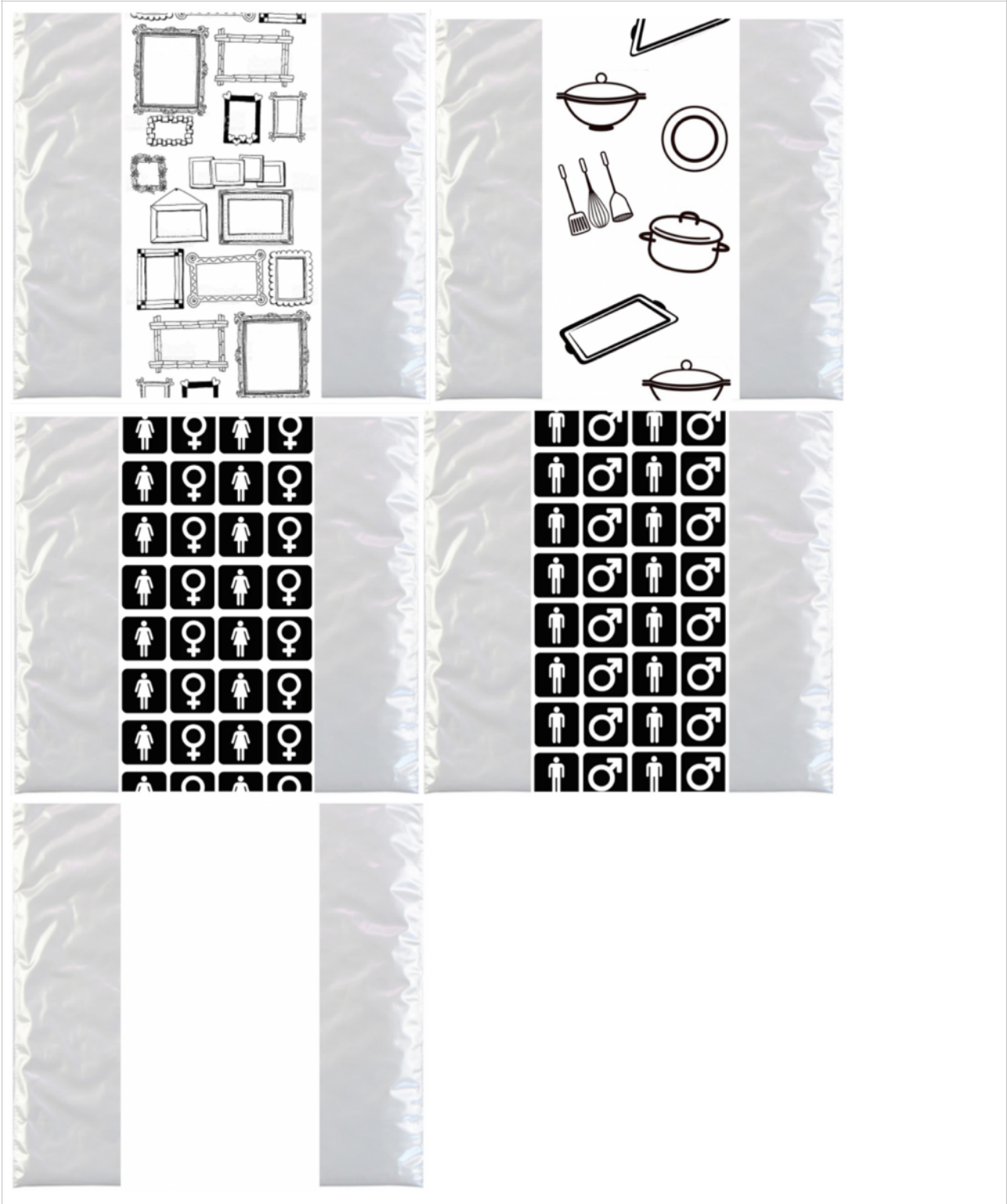


(6)



(7)

2. Imagine yourself that the art piece you just selected is delivered to your home right in time by a delivery courier. The art piece is carefully packaged in a large mailing bag. To thank you for your purchase, a strip from paper with a pattern is wrapped around the packaging. Below you can see a picture of the packaging that you received. *[Respondents were randomly shown one of the packagings below]*



When you look at the packaging with the strip wrapped around it, it is possible that you experience multiple emotions. Therefore below a list of emotions is shown. Please indicate for each emotion how strong you experience it. After having received this packaging, I would feel....

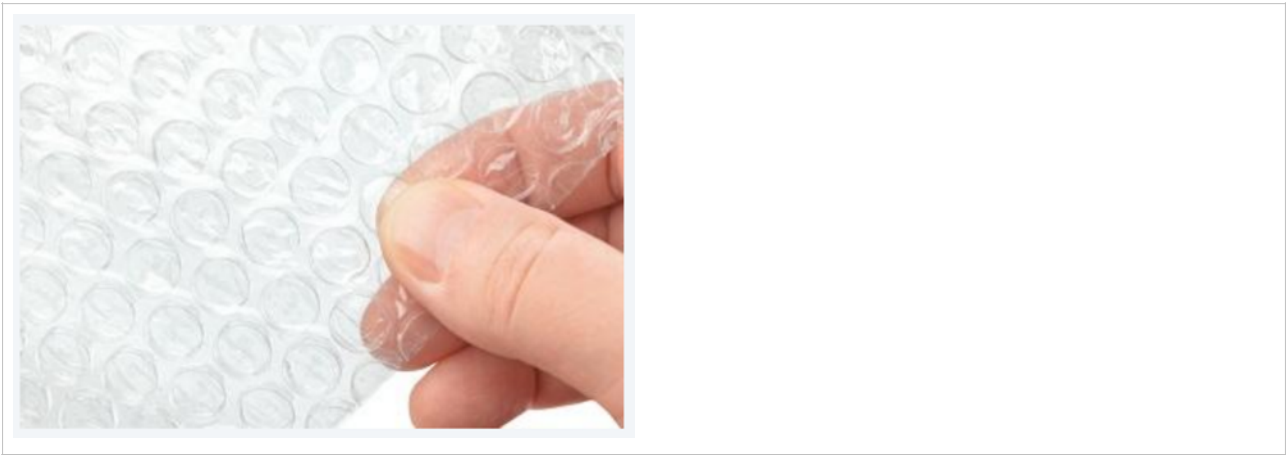
	<i>not at all</i>						<i>very strongly</i>
Ashamed	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Angry	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Annoyed	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Nervous	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uncomfortable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dissatisfied	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uncertain	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Disappointed	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Sad	(1)	(2)	(3)	(4)	(5)	(6)	(7)

3. Of course it is also possible that you feel positive emotions when you look at the packaging with the strip wrapped around it. Please indicate for the next set of emotions how strong you experience it. After having received this packaging, I would feel....

	<i>not at all</i>						<i>very strongly</i>
Happy	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Thankful	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Enthousiastic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Amused	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Curious	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Touched	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Satisfied	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Surprised	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Delighted	(1)	(2)	(3)	(4)	(5)	(6)	(7)



4. You carefully slide the strip with the pattern from the packaging. Then you open the top of the sealed bag to get the art piece out of the packaging. You see that your art piece is packaged in bubble foil (see below).



After removing the bubble foil, you see the actual art piece that you received. Carefully look at the picture below. *[Respondents saw the painting that corresponded to their choice at question 1]*





You may have noticed that the colors look (slightly) different compared to the picture you saw in the webstore. What is your opinion about the painting including the frame?

Bad	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Good
Unfavorable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Favorable
Dislike	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Like
Negative	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Positive

5. You just gave your opinion about the art piece that you received. Suppose that it cost you €2,99 euro to send it back to the webstore. How likely is it that you would return the product (send it back) to the webstore?

Extremely unlikely (1) (2) (3) (4) (5) (6) (7) Extremely likely

6. In the end, would you return the product to the webstore?

(1) Yes

(2) No

7. Thus far you answered questions about shopping for a framed painting. Now I would like to have your opinion about some general statements. Please indicate for each of the statements to what you extent you disagree or agree with it.

	<i>strongly disagree</i>				<i>strongly agree</i>		
I do my own thing, regardless of what others think	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I will sacrifice my self interest for the benefit of the group I am in	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I'd rather say "No" directly, than risk being misunderstood	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I prefer to be direct and forthright when dealing with people I've just met	(1)	(2)	(3)	(4)	(5)	(6)	(7)
If my brother or sister fails, I feel responsible	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I often have the feeling that my relationships with others are more important than my own accomplishments	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I act the same way no matter who I am with	(1)	(2)	(3)	(4)	(5)	(6)	(7)
My happiness depends on the happiness of those around me	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I will stay in a group if they need me, even when I am not happy with the group	(1)	(2)	(3)	(4)	(5)	(6)	(7)
I act the same way at home that I do at school (or work)	(1)	(2)	(3)	(4)	(5)	(6)	(7)



8. You are nearing the end of this questionnaire. However, before that I would like to acquire some personal information about you.

What is your age?

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9. What is your gender?

(1) Male

(2) Female

10. What is your nationality?

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11. Above you see the packaging once again. Do you think that the packaging fits with your identity?

*[Respondents saw the packaging that corresponded to the packaging they were exposed to earlier on in this questionnaire]*

Doesn't fit at all      (1)      (2)      (3)      (4)      (5)      (6)      (7)      Fits perfectly

12. Above you see the packaging once again. Do you think that the packaging fits with the product?

*[Respondents saw the packaging that corresponded to the packaging they were exposed to earlier on in this questionnaire]*

Doesn't fit at all      (1)      (2)      (3)      (4)      (5)      (6)      (7)      Fits perfectly

13. If you would like to say something about the questionnaire, your answers and / or the topic in general, you can write it below.

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14. If you want to have a chance to win one of ten €10 gift-cards from a store of your choice, please leave your e-mail address below. Your email address will not in any way be connected to your answers. When you do not want to make a chance to win a gift-card, you can leave this space open.

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15. Thank you very much for your participation! Your answers will help to better understand the receipt of packaging of online purchases.

Wageningen University is always looking for people who would like to fill in questionnaires like this. If you would like to receive a message when there is a new questionnaire available, and in this way contribute to scientific research, please leave your e-mail address below. Your e-mail address will not be linked to the answers you have just given, and your answers will remain anonymous. If you are not interested in this, you can leave this space empty and click "next".

This is the end of the questionnaire. If you have any questions regarding this study, you can send an email to: [jybuis@gmail.com](mailto:jybuis@gmail.com).