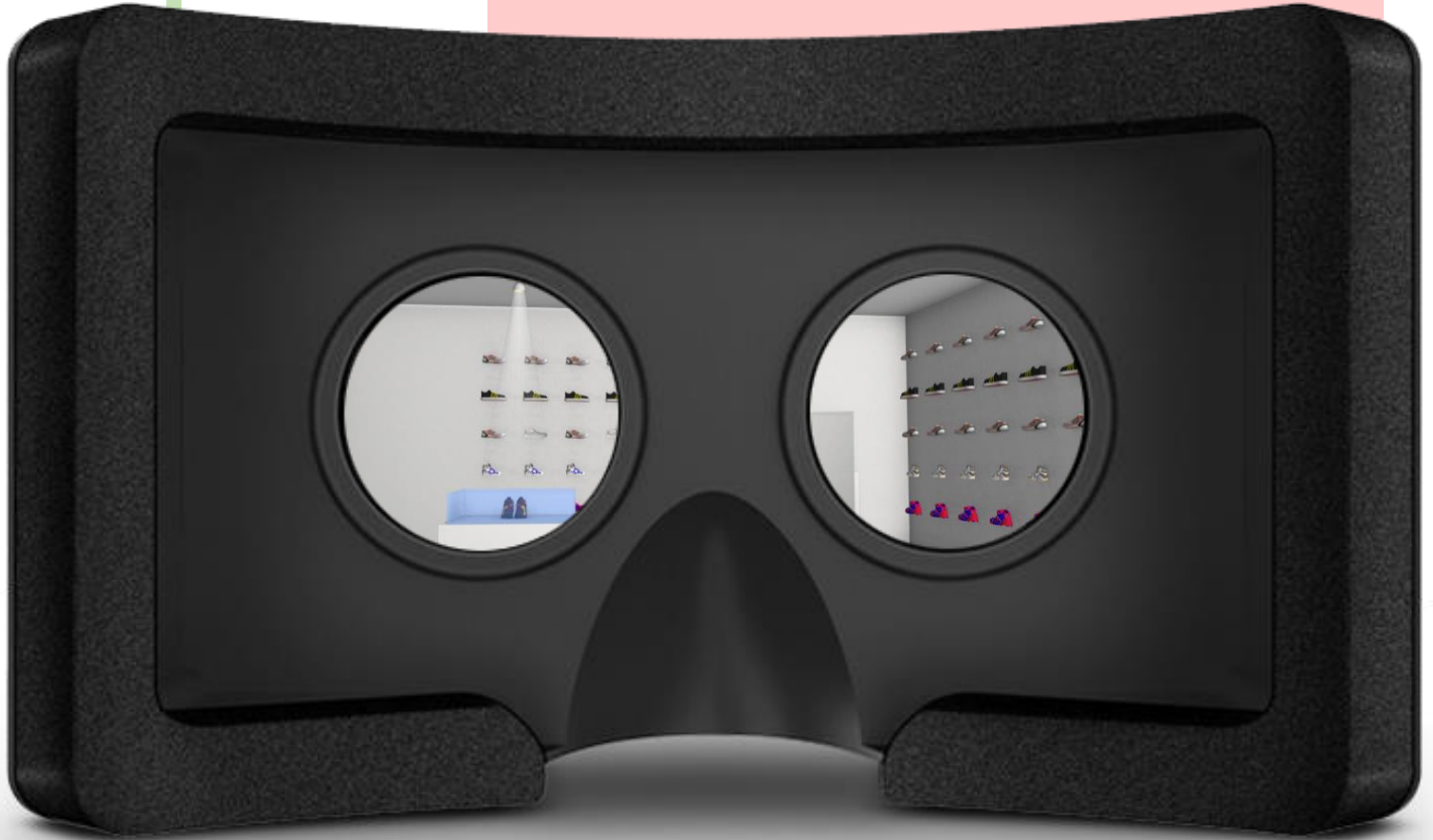# The Luxury Facade

Impact of Museum Display Techniques on the Perceived Luxury Image and Purchase Intention of Sneakers

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The Luxury Facade; Impact of Museum Display Techniques on the Perceived Luxury Image, and Purchase Intention of Sneakers.

Abstract

Background – Retailers adopt display techniques from museums in their product displays in an attempt to signal a luxury image. For instance, by singular presentation of objects, use of glass casing and focussed lighting. Yet, the effects of these display techniques are inferred rather than empirically tested.

Purpose – The purpose of this study was to investigate if using museum display techniques in product displays are useful in conveying a desired luxury image of sneakers and impact purchase intention.

Research Design – A 2x2x2 design was used including one or three objects presented, use of a spotlight or not, and the use of a glass casing or not. The impact of these factors on luxury image attributes (exclusiveness, quality, aesthetics and price) and purchase intention were investigated. Furthermore, the mediating role of self-congruity and moderating roles of shopping motivation, desire to consume unique products and need for touch were investigated.

Method – A Virtual Reality Sneaker store was presented to the respondents with one of eight different experimental conditions. Followed by a questionnaire about the variables included in this study.

Findings – Results indicated that presenting one sneaker significantly impacts the perceived quality, and marginally increases the perceived price value, compared to when three sneakers were presented. More specifically, data showed marginal evidence for perceived quality mediating the relationship between the of number of items presented and perceived price value.

Research Implications – This study contributes to the existing body of research in a unique way by exploring the effects of museum display techniques applied in the retail environment in luxury image and purchase intention. Especially by bringing together the factors number of items displayed, spotlight and use of a glass case, which were never combined in a study before.

Practical Implications – The findings indicate that using museum display techniques in the retail environment might not be as useful for conveying a more luxury image of sneakers and to impact purchase intention. However, presenting an item separately from the other merchandise does keep up appearances in terms of quality and perceived value.

Keywords
Atmospherics – Product Display – Luxury retailing – Consumer behaviour – Communicative staging

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1. Introduction

The status of luxury goods used to be derived from qualities such as rarity of the materials and artistry. From a historical and sociological point of view luxury brands existed because not everyone could afford it (Kapferer & Bastien, 2012). Yet, due to globalization and an increase in spending power the demand for luxury goods has grown, also referred to as the democratization of luxury (Kapferer & Bastien, 2012). Luxury brands had to give in to mass marketing strategies, which unfortunately threaten the legitimacy of luxury brands since this reduces perceptions of exclusivity, aesthetics and technical superiority (Brown, Kozinets, & Sherry Jr, 2003; Dion & Arnould, 2011; Hennigs, Wiedmann, & Klarmann, 2012).

Marketers also keep introducing new terms to indicate luxury, such as hyperluxury, true luxury, casual or accessible luxury, as well as the introduction of New Luxury brands (Kapferer & Bastien, 2012; Twitchell, 2012). People now have to believe that something is more luxurious, rather than knowing that it actually is (Catry, 2003; Mortelmans, 2005). Unfortunately, this is making the boundaries between different consumer classes and 'luxury brands' less obvious (Kapferer & Bastien, 2012; Truong, Simmons, McColl, & Kitchen, 2008). New Luxury brands for instance are perceived to also have higher quality, taste, and aspiration as do luxury brands, but New Luxury brands are still attainable (Atwal & Williams, 2009). Examples of New Luxury brands are Calvin Klein, Ralph Lauren, Tommy Hilfiger, or Filling Pieces. These brands have a higher status, but are still affordable for a bigger audience.

Yet, developments as the introduction of new luxury changes the consumption and experience of luxury goods (Atwal & Williams, 2007, 2009). Luxury brands are therefore exploring new ways to distinguish themselves and signal the desired luxury image. The physical store is useful for luxury brands to create an experience that exploits its superiority in an exclusive atmosphere and also appeals to consumer emotions (Carù & Cova, 2007; Catry, 2003; Hennigs et al., 2012). Especially since in-store atmospherics are more relevant in market segments with fewer opportunities to differentiate solely on the basis of price or quality, as in the overly crowded fashion retail industry (Bridson & Evans, 2004; Kotler, 1973; Nobbs, Moore, & Sheridan, 2012).

Luxury brands attempt to create a luxurious experience with a prestigious atmosphere in their stores (Hennigs et al., 2012), which is of aesthetic nature (Atwal & Williams, 2009). Dion and Arnould (2011) describe that luxury brands create artistic associations and meaning, by making use of the similarity between the brand and fine art. The staging techniques luxury retailers apply to store design, window displays, merchandising and in-store displays are meant to refer to the authoritative world of art so as to convey the luxury authority of the brand (Dion & Arnould, 2011).

Product displays are now inspired by object presentations in museums. Where they manipulate the space around an artwork in order to emphasize its special value (Böhme, 1993; Dorrian, 2014; Korff, Bendix, & Bendix, 1999). The standard technologies for displaying objects developed into presenting it under glass, and with different modes of lighting (Dorrian, 2014). The glass serves as a strategic tool to limit the sensory experience in an attempt to elicit desire for the objects through an estranged relationship (Böhme, 1993; Dorrian, 2014). It serves to protect the displayed, but also to make the object be perceived as more sacred and mysterious (Classen & Howes, 2006; Dorrian, 2014). These are associations that luxury brands try to inherit, in order to reinforce their luxury image. As a result, in-store items are presented on pedestals, and at a certain physical distance from the customers. Furthermore, lighting is focussed on the objects, and shiny display cases are used (Dion & Arnould, 2011).

By applying museum display techniques an environment is created with a more passive role for the consumers rather than one in which they can actively participate, since objects are presented to be viewed and not to be interacted with (Atwal & Williams, 2009). In contrast, actual exhibition design is changing from solely displaying objects, to creating interpretative environments (Dernie, 2006; Macdonald, 2007) because museums start to acknowledge the importance of interactivity in the servicescape. For a fact, museums even take the retail environment as an example to improve their experience (Dorrian, 2014; Forrest, 2013; Rounds, 2004). Additionally, the museum

servicescape itself is quite new in the field of environmental design research. Therefore, the effects of these museum display techniques are inferred, rather than empirically tested (Forrest, 2013; Shettel, 2008).

Retailers thus adopt these staging techniques for their merchandise displays to mimic the exclusiveness, and value-expressive function of their products, without knowing its effectiveness to actually communicate the appropriate attributes. It has become a common way to also display generic products, such as lingerie, perfume, and sneakers (See figure 1). For that reason, this study investigates the use of museum display techniques in retailing on a more generic consumer good: sneakers. In that way, it can be explored whether the display techniques can also enhance an image of a more generic product

Through a Virtual Reality experiment, it is studied if a particular sneaker is perceived as more luxurious when they are presented solely, under a spotlight, and/or under a glass case and if this impacts purchase intention. All in order to answer the following research question: to what extent do product displays using museum display techniques (1/3 items; glass case/no glass case; spotlight/no spotlight) contribute to the luxury image of sneakers? And does this ultimately affect purchase intention?

2. Theoretical Framework

In order to answer the research question, literature has been explored. In this theoretical framework, it is defined what is understood as luxury, what attributes are part of a luxury image, and how the store environments can help to convey a luxury image. Then the possible effects of using museum display techniques for retail product displays are discussed, such as its ability to convey the appropriate luxury attributes, and ultimately impact purchase intention. Finally, the moderating role of consumer needs, being motivational orientation in shopping, need for unique products, and the need for touch while shopping are discussed, as well as, the mediating role of self-congruity on purchase intention. Altogether these form the framework of the research design.

2.1 Luxury Image

Marketing luxury goods is a complex matter. Luxury brands try to preserve both differentiation and sales by marketing the dream rather than reality. A dream that is more of an illusion built on clever management of information provided to the customer (Catry, 2003). Yet, at the same time luxury brands attempt to create an experience that relates to the consumers lifestyle (Atwal & Williams, 2009).

Figure 1: Examples of Product Displays using Museum Techniques.

Luxury goods differentiate themselves from premium goods through cultural and historical heritage, next to offering better quality and asking higher prices (Kapferer & Bastien, 2009). Luxury has a symbolic dominance that is similar to a work of art, as luxury brands offer authentic products that represent unique qualities (Dion & Arnould, 2011). According to Shermach (1997) status-laden brands have a high perceived quality, luxury and class. Furthermore, it is associated with exclusiveness, and offers an emotional value (Catry, 2003).

In his study, Mortelmans (2005) refers to the importance of the sign value of luxury. The sign depends on the context in which it is provided and is thus a relative concept. Therefore, what is luxurious can differ from social group to social group, or even between individuals (Kapferer & Bastien, 2012; Mortelmans, 2005). However, the narrow definition of luxury products is defined by Mortelmans (2005, p. 507) as "those scarce products with an objective or symbolic extra value, with a higher standard of quality and with a higher price than comparable products".

Luxury marketing is thus concerned with conveying a certain image of quality, performance and authenticity, and is associated with exclusivity, status, and quality (Atwal & Williams, 2009; Phau & Prendergast, 2000). Luxury brands need to focus on these factors in order to enhance their image because they can ultimately impact the purchase (Hudders, 2012). They have to maintain a certain charisma that symbolizes superiority over others, both in terms of technical excellence as well as aesthetics. Luxury brands should thus offer a unique value in terms of quality and design (Dion & Arnould, 2011; Mortelmans, 2005).

The attributes of luxury can thus be defined as exclusivity, premium quality, aesthetics (Hudders, Pandelaere, & Vyncke, 2013) and premium prices (Hennigs et al., 2012; Mortelmans, 2005). At the same time, it is these luxury qualities that elicit a desire to buy luxury products, and thus impact purchase intention.

2.1.1 Exclusivity

Exclusivity is acknowledged as a key characteristic for luxury products (Kapferer & Bastien, 2012). Generally, it is attained through limited accessibility and rarity. It is this exclusiveness that makes products more desired because it triggers the fear of missing out (Brehm & Brehm, 2013; Cialdini & Garde, 1987) on a unique product (Caniato, Caridi, Castelli, & Golini, 2009; Hudders et al., 2013)

However, the highly competitive fashion market combined with the democratization of luxury has led to the fact that people are prone to subjective rarity (Catry, 2003; Mortelmans, 2005). Subjective rarity implies that consumers have to believe that a product is luxurious, rather than base it on facts. Therefore, the impression of scarcity becomes more and more important for luxury brands (Dubois & Paternault, 1995). This can be done through distribution strategies or pricing strategies (Hudders et al., 2013). However, the store can also influence one's perceptions of exclusivity, through an atmosphere of subjective rarity and by spreading an elitist atmosphere (Catry, 2003).

2.1.2 Premium Quality

Luxury brands originally were made by hand by true craftsman. The use of premium fabric, and craftsmanship led to higher quality products (Mortelmans, 2005). Thus offering products of technical excellence (Dion & Arnould, 2011). Research also suggests that exclusiveness and pricing are related to perceived quality, as one attribute implicitly implies the other (Herpen, Pieters, & Zeelenberg, 2005; Hudders et al., 2013; Stock & Balachander, 2005).

Although exclusivity is maintained by limiting production to a certain extent, the growing demand due to globalization and mass consumption is something the luxury industry had to give in to (Thomas, as cited by Hudders et al., 2013). The items are of high standards by ensuring innovativeness and sophistication, combined with craftsmanship (Silverstein, Fiske, & Butman, 2008). However, these market developments have made it even more important for marketers to maintain an aura of luxury around products and brands, and signal the premium quality, in order to protect a high standard of luxury (Mortelmans, 2005).

This is achieved, for instance, through store atmospherics. It was found that store interior has an important impact on the evaluation of merchandise quality (Baker, Grewal, & Parasuraman, 1994; Mazursky & Jacoby, 1986; Michon, Chebat, & Turley, 2005), which is why retailers focus more and more on the store design and merchandise presentation.

2.1.3 Aesthetics

Luxury is also related to aesthetics (Dion & Arnould, 2011). Therefore, the design of the product is an important factor. Luxury products are associated with unique design, which is also seen as an added value of luxury products (Mortelmans, 2005).

A unique design has nothing to do with usability but is purely of aesthetic nature. For example, high fashion known as haute couture is perceived as most luxurious yet is not ready to wear for everyday life. A Bugatti is an impressively designed car that looks very futuristic but is not exactly suitable for daily commuting. Aesthetics are thus an extra and unique value of the luxury product.

2.1.4 Price Premium

Another expressive dimension of luxury is the fact that it is associated with higher prices (Hudders et al., 2013). Luxury even used to be something that could only be attained by the upper class (Veblen, as cited by Mortelmans, 2005). However, it should be noted that a price premium alone does not per definition imply a luxury item. Although luxury is related to higher prices, mass-produced products with a high price are not always luxury (Mortelmans, 2005). For luxury items, price is also the result of the use of high- quality materials to create the end-product. At the same time, it is also the scarcity of products that justifies a price premium (Hennigs et al., 2012; Mortelmans, 2005).

However, price indications are not always clearly presented, or consumers do not pay attention to them. In the case of the latter, consumers rather focus on indirect cues available in an environment to form an expectation about the price (Verhoeven, van Rompay, & Pruyn, 2009; Zeithaml, 1982). The first impression is very important in forming these expectations and tends to have a strong effect on the information processing and behavioural decisions later on (Mehta, Rajiv, & Srinivasan, 2003; Simester, 1995; Zielke, 2010).

2.1.5 Desire

Luxury also relates to some type of desire (Dion & Arnould, 2011). People tend to trade up to brands in order to meet their aspirational needs (Yeoman & McMahon-Beattie, 2006). Luxury is related to higher classes, therefore people tend to mirror the habits of a class directly above

them, in turn making them more willing to spend their money on these more luxurious brands, to identify themselves with this higher class or to gain status. Something referred to as the desire for social emulation (Belk, 1988; Koehn, 2001; Truong et al., 2008).

On the other hand, the desire can also be related to scarcity or the fact that it is not attainable for everyone, causing them to save up to be able to buy the product. Generally, consumers want to have their freedom. If this is limited because it is not attainable for them, this will trigger some type of desire in people (Cialdini & Garde, 1987). Overall, a luxury image can thus create a desire in people to own the product and elicit purchase intention.

2.2 The Store Environment as a Communication Tool

As said before, luxury brands apply distribution and pricing strategies to make an impression as luxury. However, an experience involving appropriate stimuli can lead to more desirable brand-attributes generated by the consumers themselves rather than having them be forced upon them by advertising. Atmospheric stimuli can thus be more effective when it comes to its persuasive nature (Sengupta & Gorn, 2002). Retailers attempt to design their store in such a way to communicate a certain image, also referred to as substantive or communicative staging (Arnould, Price, & Tierney, 1998).

Atmospherics are applied to evoke a certain response in people (Bitner, 1992; Mehrabian & Russell, 1974). Together all atmospherics form the perceived servicescape of the consumer, to which they respond cognitively, emotionally and physiologically (Bitner, 1992; Forrest, 2013). The environment, or specific stimuli in the environment, can help to communicate the desired attributes (Arnould et al., 1998) and can influence response behaviour (Mattila & Wirtz, 2001). The context in which the brand and its products are presented is therefore very important (Buchanan, Simmons, & Bickart, 1999; Keller, 1993).

Environmental cues serve as a heuristic to make information processing of a store easier when consumers do not have all the information (Baker et al., 1994). Through cognitive processing of the stimuli, people make inferences about a focal object or person (Baker et al., 1994). For instance, the tangible service environment

can help consumers make inferences about merchandise quality and service quality, which are also important determinants for consumer decision making (Baker et al., 1994; Bitner, 1992; Mazursky & Jacoby, 1986; Turley & Milliman, 2000). Contextual factors also seem to be of great influence on price expectations (Verhoeven et al., 2009).

However, the signifier as intended might not necessarily be similar to what is signified (Mortelmans, 2005). It is important to have a clear understanding whether the target group assigns the desired meaning to the stimuli used (Verhoeven et al., 2009) since luxury depends on the context in which it is presented (Mortelmans, 2005). It is important to use stimuli in the environment that are understood in the right way and are consistent with the brand. For luxury brands, this means that they are presented in a context that emulates luxury. In a study by Verhoeven et al. (2009) it was found that symbolic cues, such as menu descriptions or table decorations, in the restaurant servicescape significantly influence luxury perceptions of the restaurant and also price image.

Therefore, one way to convey exclusivity is through excellent product presentation (Kapferer & Bastien, 2012) and a more elitist selling environment (Catry, 2003). This is especially important since the way objects are presented impacts their judgement, whether it is influenced by the person wearing it or the environment it is presented in (Arnheim, 1956; Baker et al., 1994; Böhme, 1993).

The product display is used to attract attention, highlight certain products, and elicit desire for the displayed product (Cahan & Robinson, 1984; Fiore, Yah, & Yoh, 2000) It can even increase the likelihood for impulse purchases (Ko & Rhee, 1994). More specifically, "A product display involves a consciously designed presentation of selected merchandise in a defined area, highlighting the product(s) and creating a mood and/or message with the intent to positively affect consumer's approach responses" (Fiore et al., 2000, p. 29). A product display is usually a combination of many design elements, such as product, background, signage, lighting, fixtures, music and other sensory stimuli in order to create an experience around the product (Fiore et al., 2000).

2.2.1   Impact on Luxury Image

Symbolic meanings communicated through cues in the environment have a strong impact on consumer perceptions (Mick, 1986). Dion and Arnould (2011) found that for luxury store design the aesthetic vision is highly important. Luxury retailers take inspiration from the art world for their product displays to create a certain context around their products and distinguish themselves as more luxurious. Such as displaying art pieces in their store, making references to well-known artists in their campaigns or adopting display techniques from museums. As a result, in-store pedestals now display single items, under spotlights and in glass display cases (Dion & Arnould, 2011).

Retailers apply these display techniques to differentiate themselves from others (Pine & Gilmore, 1998) with the aim to induce adoration of the brand and its products (Dion & Arnould, 2011), and communicate and inherit appropriate associations. The display techniques are an attempt to enhance the image of their products (Bitner, 1992) as more luxurious and desirable. Applying these different substantive staging techniques can impact the evaluation of quality and value, but also increase perceptions of exclusiveness. Results that could go together, since studies have shown that if one perceives either exclusivity, quality or perceived value could also imply the other (Hennigs et al., 2012; Herpen et al., 2005; Hudders et al., 2013; Mortelmans, 2005; Stock & Balachander, 2005).

The cognitive effects are induced by the provided information in the environment and the appropriateness/congruity with existing knowledge (Fiore et al., 2000; Mandler, 1982). The right associations can then be elicited subconsciously. If that happens, the use of these techniques in the product display will impact consumer evaluation of a brand and products as being luxurious, with attributes such as exclusiveness, premium quality, aesthetics, and price. Therefore, the following hypotheses were formulated:

H1   Displaying only one item on the pedestal will positively influence perceived luxury image, in terms of the perceived a) exclusiveness b) quality, c) aesthetics, and d) price, compared to when three items are displayed on the pedestal.

H2   Displaying the pedestal under a spotlight will positively influence perceived luxury image, in terms of perceived a) exclusiveness b) quality, c) aesthetics and d) price, compared to under general store lighting (hence no use of spotlight).

H3   Displaying the item(s) on the pedestal under a glass case will positively influence perceived luxury image, in terms of perceived a) exclusiveness b) quality, c) aesthetics, and d) price, compared to when the items are not displayed under a glass case.

However, stimuli are evaluated together in forming the perceptions (Bitner, 1992; Forrest, 2013; Mattila & Wirtz, 2001). When it comes to the effects of the museum display techniques, these are all expected to lead to a more positive perceived exclusiveness, higher quality, and price, compared to when they are not used. However, when the techniques are combined they could have even more impact. Thus, the more techniques are implemented (single item, spotlight and glass casing), the greater cognitive responses will be.

H4   The more museum display techniques, (thus single item, glass casing and spotlight) are incorporated in the product display the more positive the effect will be on perceived luxury image, in terms of perceived a) exclusiveness b) quality, c) aesthetics and d) price.

2.2.2   Impact on Purchase Intention

The goal of designing atmospherics is to ultimately evoke a certain response (Bitner, 1992; Mattila & Wirtz, 2001; Mehrabian & Russell, 1974). The museum display techniques are applied to impact consumer behaviour. By conveying a more luxury image brands attempt to elicit a bigger desire to own the product (Hudders, 2012).

Luxury is claimed to be related to some type of desire (Dion & Arnould, 2011). A desire that people want to fulfil by consuming the product. Luxury consumption is therefore claimed to be driven by a "symbolic desire to belong to a superior class" (Kapferer & Bastien, 2009).

Museum display techniques are thus applied to the product display to elicit a greater desire, whether it is the glass case, spotlight or presenting only a single product. Since a luxury image relates to aspiration and desire to own the product, the use of these luxury image enhancing techniques are expected to positively influence purchase intention. These insights have led to the following hypothesis:

H5   Displaying only one item on the pedestal will positively influence purchase intention, compared to when three items are displayed on the pedestal.

H6   Displaying the pedestal under a spotlight will positively influence purchase intention, compared to under general store lighting (hence no use of spotlight).

H7   Displaying the item(s) on the pedestal under a glass case will positively influence purchase intention, compared to when the items are not displayed under a glass case.

The museum display techniques are applied to evoke a certain response in people (Bitner, 1992; Mattila & Wirtz, 2001). In this case, the more luxurious the product displayed looks, the more desirable the product is expected to be. Again it is expected that the more museum display techniques are applied to the product display the more positive the impact on purchase intention will be. The study therefore also investigates

H8   The more museum display techniques, (thus single item, glass casing and spotlight) are incorporated in the product display, the more positive the effect will be on purchase intention.

The environmental cues together form perceptions, and ultimately impact response behaviour (Bitner, 1992; Mehrabian & Russell, 1974). As noted before, luxury consumption is the result of the symbolic meaning the brands represent. Therefore, the image conveyed impacts can impact the response people have. The image conveyed by the stimuli should thus symbolize luxury and in that way elicit desire. Therefore, this study also considers luxury image to mediate the effect of the museum display techniques on purchase intention :

H9   The effect of the use of the staging techniques (single item/three items, glass casing/no glass casing and spotlight/no spotlight) on purchase intention, is mediated by the luxury image.

2.3 The role of consumer needs

Forrest (2013) states that "customers interact with atmospheric stimuli on different levels and for different purposes". They seek out environments that best fit their needs and goals. Therefore, different individual needs can moderate the effect of the atmospherics. Such as motivational orientation for shopping, ones' need for unique products or the need for touch one has when shopping. Additionally, self-congruity plays a mediating role in the effect of the environment on purchase intention. These factors stress the importance of designing the environment for the right audience (Forrest, 2013), because what is perceived as luxurious not only depends on the signified but also on the audience (Mortelmans, 2005).

2.3.1 Motivational orientation

One shops out of necessity, while the other shops for entertainment. Hence, people have a motivational orientation that is utilitarian or hedonic (Babin, Darden, & Griffin, 1994; Holbrook & Hirschman, 1982; Kaltcheva & Weitz, 2006). Research shows that the more hedonically people are motivated, the more attention they pay to the specific attributes of the retail environment (Alexander & Olivares Alvarado, 2014). Which confirms research indicating that atmospherics are more relevant to hedonic retailing than utilitarian shopping (Kotler, 1973; van Rompay, Tanja-Dijkstra, Verhoeven, & van Es, 2012). These findings indicate that hedonic shoppers might be more receptive to the luxury cues in the environment.

Additionally, luxury goods offer hedonic value, by connecting with consumers on an emotional level (Kapferer, 1997; Vigneron & Johnson, 2004). Therefore, this study takes shopping motivation into account as a moderator. The product display design with museum display techniques might have more impact on the image formed by hedonic shoppers than with utilitarian shoppers. It is expected that this effect is more positive for hedonic shoppers since they pay more attention to the details in the environment and also might be more aware of luxury stimuli. The following hypothesis will also be explored:

H10 The effects of the product display on a) exclusivity, b) quality, c) aesthetics, d) price, e) purchase intention are moderated by an individual's shopping

motivation, i.e. the evaluation of hedonic shoppers will be more positive than utilitarian shoppers.

2.3.2 Need for unique products

Generally, consumers like to be unique, which they can express through owning exclusive products (Herpen et al., 2005). However, not every person has a strong need to buy exclusive and unique products (Lynn & Harris, 1997a, 1997b). Therefore, the impact of a product display to emulate exclusiveness and luxury might be influenced by the value consumers attach to purchasing unique products. A study by Kastanakis and Balabanis (2012) also showed that people high in need for uniqueness are looking for more exclusive products and are less prone to bandwagon effects.

This study thus takes a personal interest in purchasing unique products into account as a moderator. It is expected that people with a high need for unique products pay more attention to the luxury cues in the product display and value the luxury image communicated more than people who have less need for unique products. The same goes for purchase intention, if a product looks more luxurious it might be more desirable for people with a high need for unique products. The following is therefore expected:

H11 The effects of the product display on a) exclusivity, b) quality, c) aesthetics, d) price and e) purchase intention is moderated by an individual's need for unique products, i.e. the effect is more positive for people with a high need for unique products than one with a low need for unique products.

2.3.3 Need for touch

Touch is important for product evaluation by offering unique information that cannot be attained through vision (or other senses) (Lindauer, Stergiou, & Penn, 1986) such as the perception of product quality (Wheatley, Chiu, & Goldman, as cited by Grohmann, Spangenberg, & Sprott, 2007). Touch enables consumers to evaluate products more accurately and distinguish products based on product quality (Grohmann et al., 2007). If they cannot touch the product they have to make inferences about product quality based on other information provided by the environment (Baker et al., 1994; Grohmann et al., 2007).

Research by Grohmann et al. (2007) indicates that for high quality merchandise the tactile information is especially important for a positive product evaluation at the point of purchase. This is because not being able to touch gives consumers a high level of uncertainty. "Tactile input (vs. lack of tactile input) leads to positive consumer responses for any product of an acceptable quality level" (Grohmann et al., 2007, pp. 237-238). Additionally, touch alone already can positively influence perceived ownership of an object (Peck & Shu, 2009).

However, the need for touch can differ from person to person. This need for touch (or NFT) is conceptualized by Peck and Childers (2003b) as instrumental versus autotelic need for touch. While autotelic NFT's use touch for emotional purposes, instrumental NFT's evaluate products through touch, and thus use it to get necessary information about the product. In line with this, Grohmann et al. (2007) states that tactile input is better explained by information-processing mechanisms than affective-based processing.

Individual differences in need for touch could also lead to differences in evaluation of the luxury attributes when a glass case limits the ability to touch products. In a study performed by Grohmann et al. (2007) a glass case was also both used or not used, and a significant interaction was found between the ability to touch, need for touch and quality perceptions. This can be explained through cognitive load, or perceptual load, as the glass forms a barrier for information processing ability (Krishna, 2012).

The glass case can thus block information processes which influences perceptions and evaluations. Therefore, consumers need for touch should also be taken into account as a moderator for the glass case versus no glass case conditions. It is expected that people with an instrumental need for touch are more negatively impacted by the use of a glass case than people with an autotelic need for touch, since the glass case hinders physically evaluating the product.

H12 The effects of the use of a glass case in the product display on a) exclusivity, b) quality, c) aesthetics, d) price, e) purchase intention, is moderated by an individual's need for touch, i.e. instrumental NFT's will be more negative towards the product than autotelic NFT's.

2.3.4 Self-congruity

Luxury brands are related to desire, which can be aspirational in nature (Belk, 1988; Truong et al., 2008). Amatulli and Guido (2011) state that the main motivation for luxury purchase intention is to satisfy inner drives (Amatulli & Guido, 2011). Consumers seek for brands who help them express their own values through symbolic meaning (Dubois & Duquesne, 1993).

Several studies found significant evidence for the effect of self-congruity on behaviour, attitudes and more specifically purchase intention (Ericksen, 1997; Hogg, Terry, & White, 1995; Landon Jr, 1974; Sirgy, 1985; Smith et al., 2007; Sparks & Guthrie, 1998). Sirgy (1982) explains self-congruity as the comparison consumers make between the symbolic brand/product image and their self-concept in order to evaluate a brand/product and make a purchase decision (Escalas & Bettman, 2005; Wiedmann, Hennigs, & Siebels, 2009) Thus, if consumers can relate their identity to a brand or its product they will be more likely to purchase the product. Boguslaw (2015) also found self-congruity to impact purchase intention of luxury items.

Although the self-concept consists of many dimensions (actual self, ideal self, social self, and ideal social self) the effects of self-congruity on purchase intention hold true, regardless of whether it is compared to actual self or ideal self (Sirgy, as cited by Quester, Karunaratna, & Kee Goh, 2000; Sirgy, 1985).

Product image consists of attributes associated with a product or service, and can be impacted by marketing communication efforts such as advertising or merchandise presentation (Ericksen, 1997). Consumers compare this product image to what they like to represent, called self-congruity, before they make the decision to buy. Studies have acknowledged the mediating effect of self-congruity on purchase intention (Sirgy, 1985; Sirgy & Su, 2000). Therefore, this study also includes self-congruity as a mediator to purchase intention.

H13 The perceived level of self-congruity mediates the effects of the product display on purchase intention.

2.4   Research Design

This research aims to investigate if lending display techniques from museum displays for luxury product displays are effective. More specifically, the usefulness of these displays for luxury retail environments to signal the desired luxury image and eventually impact purchase intention.

Hence, a pedestal is used to display a single object, a spotlight on the product, and a glass casing encloses the object. Generally, this is not the way products are presented in retail stores. Therefore, the difference between normal retail environment staging with "just" a pedestal and some products and these techniques are the experimental conditions of this research. This results in a 2x2x2 design, with single or three objects displayed, the use of spotlights or not and the use of a glass case or not. See figure 2 on the for the full research design.
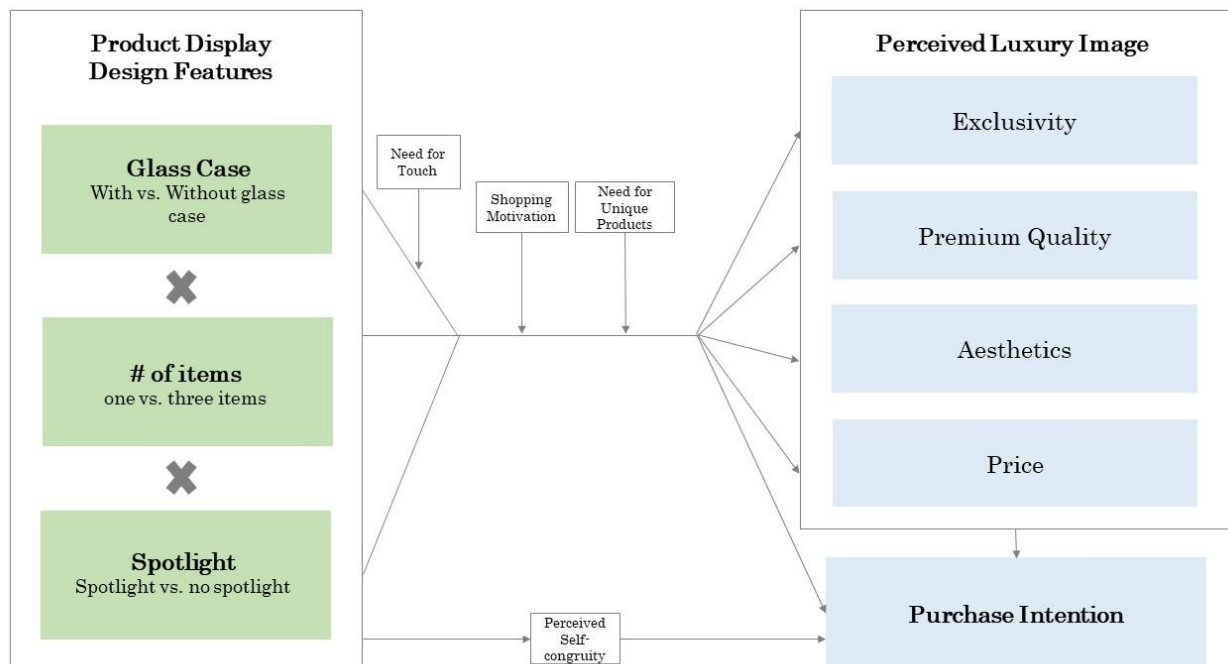

Figure 2: Research Design

3 Methodology

This section discusses the stimuli used for the study and the measurement of the constructs, followed by the procedure and the research sample.

3.1 Stimuli

A Virtual Reality environment of a Sneaker store was created for the experiment. A 3D environment was designed in SketchUp and transferred via the app Modelo to view the 3D model in Virtual Reality using Google Cardboard 2.0. Virtual Reality was chosen to avoid familiarity of the respondents with the environment and to make sure they do not have associations with the store to avoid bias.

Virtual Reality also enables to simulate a store environment in a cost-efficient yet realistic way and there have been promising results in previous studies for using Virtual Reality as valid method in experimental research (Berneburg, 2007; Bressoud, 2013; Burke, Harlam, Kahn, & Lodish, 1992; Difonzo, Hantula, & Bordia, 1998; van Herpen, van den Broek, van Trijp, & Yu, 2016). The fact that the virtual environment moves along with the users movement creates a realistic experience for the user (Carvalho, Freire, & Nardi, 2010).

The experimental store environment in this study needed to be very basic to not distract too much from the product display. A museum calls this a 'Zero Atmosphere', which is applied so the environment does not exceed the experience of the art presented. Interiors imply some type of aesthetics, by using steel, glass, and white (Dorrian, 2014). The experimental environment also included white walls, with white shoe shelves and grey, industrial floors. Additionally, the use of any other vibrant colours in the interior was avoided, since the use of colours could have influenced responses as well.

As people are already familiar with surroundings of existing sneaker stores (see figure 3), sneakers were displayed on shelves on the wall and on the pedestal in the middle of the store (depending on the experimental condition, with one or three sneakers).

For the design of the sneaker, it was intended to not be from a brand that people are familiar with and with no clear display of the brand logo. This to eliminate expectations consumers already had for a brand, since brand prominence could have impacted evaluation (Han, Nunes, & Drèze, 2010). Consumers also respond differently to product displays showing products of similar brands than of one brand (Buchanan et al., 1999). Therefore, in the condition when three sneakers were displayed, these were all of the same brand (Figure 4).
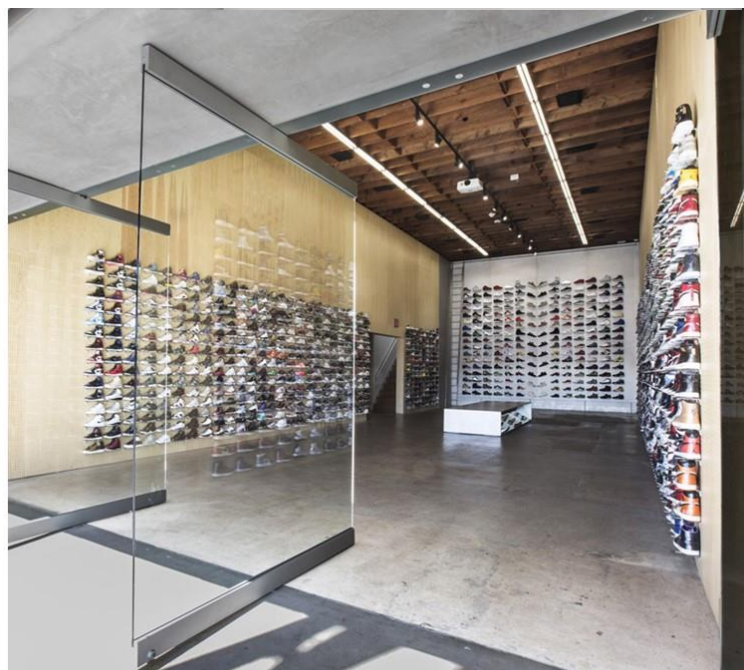

Figure 4: The shoe design used in the animation.

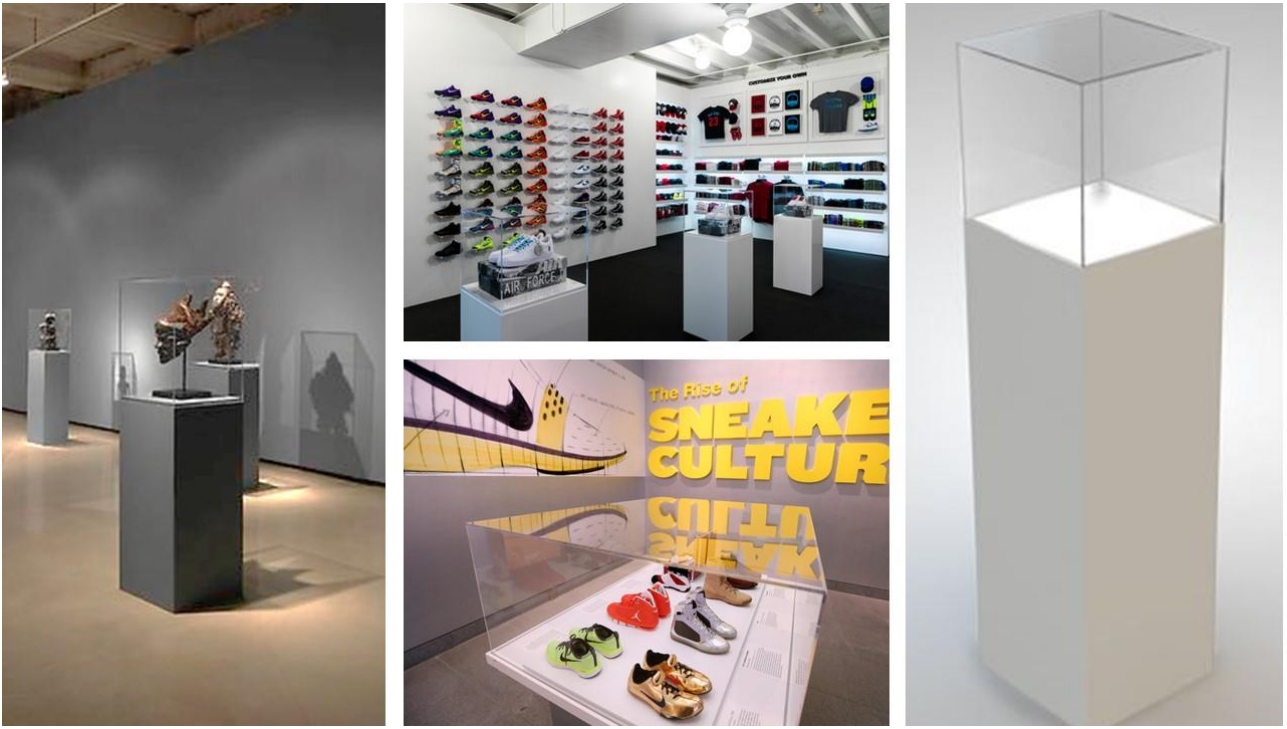Figure 3: Collage of sneaker stores.

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Figure 5: Collage of pedestals with glass casing in museums, and sneaker stores.

Figure 6: Collage of Spotlight usage

For the presentation of the experimental conditions the pedestal was the base for the product display. A pedestal can be described as a platform or podium, which sole purpose is to display objects or in this case sneakers presented under glass (or not) (Figure 5).

Furthermore, spotlights can be used to highlight the product display more. In museums lights are used from different angles, or in different light installations, as seen in figure 6.

This study used general store lighting, and included a spotlight to highlight the pedestal in certain experimental conditions.

The store for the virtual reality environment thus had a very simple design. Figure 7 shows the control condition (X1), presenting the products using stimuli that people are already used to. While Figure 8 shows the design including all 'luxury' stimuli (X8). All different conditions can be found in Appendix 1.
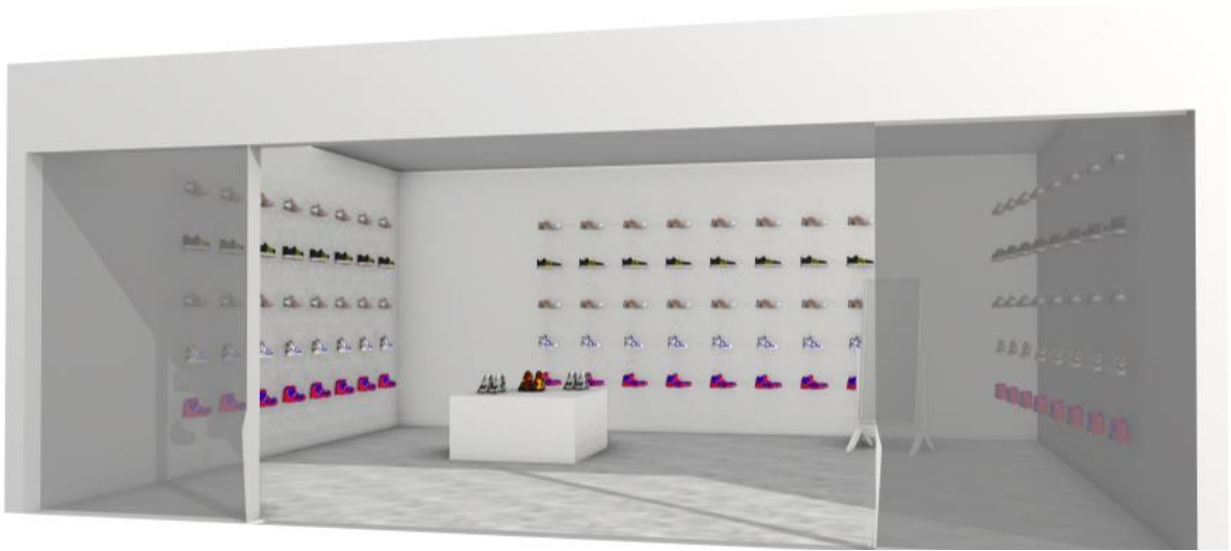
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Figure 7: Experimental condition 1 – Three products X No Glass Case X No Spotlight

Figure 8: Experimental condition 8 – Single product X Glass Case X Spotlight

3.2 Measurement

The independent variables were defined as the different experimental conditions of the product display presented in Virtual Reality, thus one or three items, spotlight or no spotlight and glass case or no glass case. The dependent variables were measured by questionnaire. This section discusses the measurement scales of these dependent variables, being the luxury image attributes and purchase intention as well as the moderating variables shopping motivation, desire for unique products, need for touch, and the mediator self-congruity. The complete questionnaire can be found in Appendix 2.

3.2.1 Dependent Variables

The dependent variables were defined as the perceptions a product display evokes regarding luxury attributes and the desire to own the product. Luxury attributes were operationalized as the perceived exclusiveness, quality, aesthetics of the product presented and the value it represents. The desire for the product is operationalized as purchase intention.

Exclusivity

In order to measure the perceived exclusivity, the scale developed by Hudders et al. (2013) was used. The scale included luxury attributes consumers assign to the exclusivity of a brand, or as they call it the expressive facet of a luxury brand. This scale included attributes such as *This product is … "Rare"*, *"Unattainable"*, *"Exclusive"* and *"Unique"*. Respondents were asked to indicate the extent to which they relate these concepts to the product presented in the display, on a seven-point Likert scale from "strongly disagree" to "strongly agree".

Quality of the product

Buchanan et al. (1999) developed a scale to measure one's attitude regarding the quality of a product. This semantic scale was used to indicate one's perception of the product presented on items such as "*Good quality / poor quality*", "*Exceptional merchandise / ordinary merchandise*" or "*Will last a long time / won't last a long time*". Additionally, items from Hudders et al. (2013) on premium quality were mostly represented in this scale, however, one item was added regarding the craftsmanship aspect of products.

Aesthetics

Luxury products also have an aesthetic aspect, which was also measured by the scale developed by Hudders et al. (2013). Respondents were asked to indicate the extent to which they relate the Aesthetic concepts to the product presented in the display, on a seven-point Likert scale from "strongly disagree" to "strongly agree". This scale included items such as "*Elegance*", "*Innovativeness*", "*Creativity*" and "*Comfort*".

Premium value

Perceived value was operationalized as the perceived value of the product. Therefore, respondents were given a scale on which they had to indicate how much they think the product costs. It was decided to use a price scale ranging from €50,00 to €650,00. After looking at the prizes of luxury sneakers in multiple stores, the maximum was set to €1.050,00 (For one of a kind sneakers prices can go up to €10.000,00). However, the participants in the pilot study all noted that this maximum was too high as a reference point for students and starters.

Purchase Intention

Luxury elicits a desire to own the product, which was operationalized in this study as the intention to purchase the product. Statements from previous studies have been amended to measure purchase intention (Dodds, Monroe, & Grewal, 1991; Sääksjärvi & Morel, 2010). The respondents were asked to evaluate the statements on a seven-point scale from 'strongly disagree' to ' strongly agree'. Overall, purchase intention was measured by items such as "*I find this product very interesting*", "*I would not consider purchasing these sneakers*" (-) and "*I would like to own this pair of sneakers*".

3.2.2   Moderators

This study also acknowledged moderators, being shopping motivation, need for unique products and need for touch.

Shopping motivation

Babin et al. (1994) created scales to measure the hedonic or utilitarian value consumers assign to their latest shopping trip. This study has amended these statements to more general items to measure peoples' overall motivation for shopping. Therefore, statements like "*Shopping for me is truly a joy*" or "*I enjoy shopping for its own sake, not for what items I purchase*" were used for measuring hedonic motivation. Furthermore, to measure utilitarian motivation for shopping statements such as "*Shopping for me is a necessity*" or "*I am disappointed when I need to visit multiple stores to buy what I need*" were used. Respondents were asked to evaluate these statements on a seven-point Likert scale from "strongly disagree" to "strongly agree".

Need for uniqueness

In order to measure, the need for unique products of the respondents, the scale of Lynn and Harris (1997b) was used, called *desire for unique consumer products*. This scale measured the degree to which a person is motivated to consume unique products that not many other people possess. The scale consisted of eight items, which were evaluated using a Likert scale from "strongly disagree" to "strongly agree". Examples of items are "*I am very attracted to rare objects, "I enjoy having things that others do not"* and "*I enjoy shopping at stores that carry merchandise that is different and unusual*".

Need for touch

To measure the need for touch of consumers when they go shopping the scale by Peck and Childers (2003a) is used to indicate if people's need for touch is autotelic or instrumental. Therefore, "*touching products can be fun*" or "*I like to touch products even if I have no intention of buying them*" were items representing autotelic NFT. Whereas, "*I place more trust in products that can be touched before purchase*" and "*I feel more confident making a purchase after touching a product*", are statements representative of instrumental NFT. These statements were evaluated on a seven-point Likert scale from "strongly disagree" to "strongly agree".

3.2.3 Mediator

The mediator included in this study is Self-Congruity. The scale used to measure this construct is now discussed.

Self-Congruity

Self-congruity was measured on a seven-point Likert scale ranging from disagree to agree by using scales amended from studies by Sirgy et al. (1997); Sirgy and Su (2000); Traylor and Joseph (1984). The respondents were asked to express their consistency between product and their overall self-concept by evaluating statements regarding dimensions of self-concept. Examples of items are "*The sneaker is consistent with how I see myself*" (actual self-image), "*The sneaker is consistent with how I like to see myself*" (ideal self-image). "*The sneaker reflects how I like to be perceived*" (ideal social-image). These together formed the overall perceived self-congruity of the respondents with the sneaker presented, since it was indicated in literature that the effects hold true regardless of the dimension of self-concept (Sirgy, as cited by Quester et al., 2000; Sirgy, 1985).

3.3 Procedure

The study was created using Qualtrics. The questionnaire started with a short introduction to the study and the respondents were asked if they consent to participate in the experiment.

The experiment then started off with the Virtual Reality presentation. The respondents had to read a scenario before they put on the VR Glasses. The scenario described that they are looking for a pair of sneakers and end up in a sneaker store that might be able to help them. The respondents were then shown a VR animation of a sneaker store with one of the eight experimental conditions randomly assigned to each respondent. The respondents got the opportunity to look at the VR Sneaker store as long as they would like, to get an impression of the store (Figure 9). Different scenes were added to the VR experience, for them to view the store from multiple angles.

Before taking the VR glasses off, they were asked if they noticed the pedestal and more specifically the black/yellow/red shoe in the middle of the pedestal, given the fact that the questions were about their perceptions of this specific shoe. Then they could proceed to take off the VR glasses.

Figure 9: Virtual Reality Experiment

Following the VR animation, respondents were asked to evaluate items about the dependent variables regarding the luxury attributes and the extent to which they associate them with shoe. Attributes regarding exclusivity, quality, aesthetics and perceived price. They were also asked to rate some statements about their purchase intention, followed by items regarding self-congruity.

As a manipulation check, the respondents were then asked what stimuli they noticed in the environment. Thus, whether they saw a glass case, spotlight and how many items they remember to have seen on the pedestal.

The questionnaire continued with some demographic questions such as age, gender, education, employment status and income.

Finally, the respondents had to rate some statements about their shopping behaviour and consumption needs in general. These statements related to the moderators in this research design.

3.4 Sample

The target group was students and starters, with a maximum age of 35, for they are most familiar with the Sneaker Culture. Since sneakers and streetwear are quite common among students it is not necessary to include only Dutch students, as this urban culture exists among adolescents regardless of cultural background.

The respondents were gathered through convenience sampling due to time constraints. The SONA system provided participants, fellow students were asked to participate, and family and friends who fit the target group. Additionally, since a mobile VR device was used, the respondents could be gathered anywhere. Still, the aim was to get a sample that is as diverse as possible, when it comes to demographics.

The final sample of this study is **N = 156**, after deleting 10 responses, of which six were invalid and four impacted the educational level of the sample. The reason for deleting responses was the fact that three filled in completely agree on all scales, while two wanted to stop the experiment after not feeling well from the Virtual Reality. Finally, one respondent was colour blind and could not distinguish the glass case from the pedestal in his experimental condition and was therefore also deleted from the analysis. The other people suffering from colour blindness did not have any problems with viewing the environment and were therefore kept in the sample. Finally, four respondents were deleted because they were a low educated minority within the sample, and deleting them resulted in sample of all high educated students and starters.

Table 1 Overview of Demographics

	Frequency	Percentage
Gender		
Female	96	62%
Male	60	38%
Education		
None	-	-
Primary School	-	-
High School (C levels / VMBO and lower)	-	-
High School (B levels / HAVO)	5	3%
High School (A levels / VWO/Gymnasium)	102	65%
MBO	-	-
HBO	12	8%
Bachelor of Science	31	20%
Master of Science	6	4%
Professional degree	-	-
Doctorate degree	-	-
Occupation		
Part-time employed	5	3%
Full-time employed	8	5%
Self employed	2	1%
Currently out of work	2	1%
A homemaker	-	-
A student	139	89%
Retired	-	-
Unable to work	-	-
Income		
Below average	124	80%
Average	10	6%
More than average	6	4%
Rather not say	16	10%
Color Blindness	3	2%

The average age of the respondents was 21, with a minimum age of 18 and a maximum age of 32. From the sample, 62% was female and 38% was male. Most of them were students, of which a few were already working, which explains why the largest part of the sample had no income. An overview of all demographic information is presented in Table 1 below. (See Table 9 in Appendix 3.1 for an overview of the distribution of the experimental conditions among the demographics).

3.5 Validity and Reliability

Factor Analysis was carried out to indicate validity of the scales. Secondly, the Cronbach's alpha was determined to indicate reliability of the scales.

3.5.1 Factor Analysis

A principal component analysis was conducted on 67 items using Varimax. The Kaiser-Meyer-Olkin verified the sampling adequacy for the analysis, KMO = **.77** (Appendix 3.1). An acceptable value according to Field (2009). This indicates that the factor analysis performed is accurate and reliable.

The Varimax was performed on the data set and resulted in 17 Factors. In general, the items clustered in factors that indicated the scales as proposed. However, several items were deleted to improve construct validity of the scales. When one of the items did not load over a value of 0.4, loaded in a completely different factor, or did not load clearly in one factor but in multiple factors, this item was deleted from the final analysis. After analysing the Factor loadings in the rotated Component Matrix, 21 items were deleted. Appendix 3.2 shows the factor loadings with all remaining items per construct.

3.5.2 Reliability Analysis

In order to determine reliability of the scales in this study, the Cronbach's alpha was determined for each scale. The correlation was determined, if only two items were left for a scale The threshold used as acceptable is a value of over 0.7 (Field, 2009). Table 2 shows an overview of the final Cronbach's alpha and number of items for each construct. For Shopping Motivation and Need For Touch, the table shows the overall alpha as well as the stratified alpha. Almost all alphas had a value of 0.7 and higher, therefore it can be stated that the scales are reliable.

After the Factor Analysis, the Aesthetics scale and Purchase Intention scale consisted of two items, therefore the correlation is determined for these scales instead of the Cronbach's Alpha. The data shows a positive correlation ($r = .42$, $p<0.001$) for the remaining Aesthetics items, indicating a genuine relationship between the two items. Therefore, these items together are used to represent the Aesthetics construct. For Purchase intention results also indicated a positive correlation ($r = .56$, $p<0.001$) between the two items, again suggesting a genuine relationship between them. Therefore, these items could be used together to represent purchase intention.

Table 2 Cronbach's Alpha for all constructs

Construct	N	α
Exclusivity	3	.69
Quality	6	.80
Aesthetics	2	n/a
Price Value	1	n/a
Purchase Intention	2	n/a
Self-Congruity	5	.92
Shopping Motivation	10	.94
Utilitarian	7	.92
Hedonic	3	.87
Desire to Consume Unique Products	8	.85
Need For Touch	10	.89
Autotelic	6	.92
Instrumental	4	.79

4 Results

This study investigates the effect of the number of sneakers presented on a pedestal, the use of a spotlight and a glass case, on luxury image and purchase intention. Whereas luxury image is operationalized on the attributes exclusivity, premium quality, aesthetics and perceived value.

Notably, table 3 first presents the extent to which the respondents perceived the stimuli, compared to what they were actually shown in the Virtual Reality experiment. From these data it can be noted that the number of items is the most clear cue to notice for people, compared to the glass case and spotlight.

MANOVA was first carried out to indicate the impact of the factors (number of items, spotlight use or not, glass case or not) on luxury image attributes, self-congruence, and Purchase Intention. If necessary, further results were explored through univariate analysis. PROCESS by Andrew F. Hayes was used to investigate possible mediations.

Table 3 Overview of division of the dependent variables and how these were perceived by the respondents

Actual Displayed			As Perceived by Respondent		
			1/Yes	3/No	5 / ?
		N	n	n	n
Number of	1	79	72	1	6
Items	3	77	1	71	5
Spotlight	Yes	77	35	24	18
	No	79	9	44	26
Glass Case	Yes	78	61	15	2
	No	78	3	71	4

Furthermore, the expected moderating variables were investigated through MANCOVA. The expected moderators shopping motivation, desire to consume unique products, and need for touch were each tested as covariates in separate MANCOVA analysis.

This section discusses the main effects of the factors, followed by the interaction effects, and finally moderations are explored. The results give insight into which proposed hypotheses are confirmed or not. An alpha value of .05 is applied to indicate the significance of the outcomes.

4.1 Main Effects

The main effects of the number of items presented, the use of a spotlight or not, and the use of a glass case or not on the outcome variables were investigated through MANOVA (See Table 4 for the Multivariate results, and Table 5 for the Univariate results).

Table 4 Overview Multivariate Results

	Λ	F	p	Partial η²
Number of Items	.93	1.85	.09	.07
Spotlight	.97	.63	.70	.03
Glass	.98	.60	.73	.03
Number of Items *Spotlight	.99	.30	.93	.01
Number of Items *Glass	.96	1.00	.43	.04
Spotlight*Glass	.97	.83	.55	.03
Number of Items *Spotlight*Glass	.98	.62	.72	.03

Note: For all goes: Degrees of Freedom of 6, 143.

Table 5 Overview of Univariate Results

	Exclusivity		Quality		Aesthetics		Price Value		Purchase Intention		Self-Congruence	
	F	P	F	p	F	p	F	p	F	p	F	p
Number of Items	2.15	.14	6.68	.01	.01	.94	3.53	.06	.45	.51	1.12	.29
Spotlight	.01	.94	.27	.60	.33	.57	.00	.98	0.37	.55	2.38	.13
Glass	.93	.34	1.09	.30	.41	.52	.37	.55	.18	.67	.61	.44
Number of Items*Spotlight	.18	.68	.42	.51	.40	.53	.22	.64	.94	.33	.39	.54
Number of Items* Glass Case	.04	.84	.04	.84	2.61	.11	.87	.35	.66	.42	1.58	.21
Spotlight* Glass Case	3.60	.06	1.32	.25	.50	.48	1.89	.17	.55	.46	.07	.80
Number of Items* Spotlight* Glass Case	.47	.50	1.15	.29	.02	.90	.50	.48	.00	1.00	.06	.08

The number of items presented on the pedestal are indicated to have a marginal effect on the outcome variables (Λ=.93, $F(6,143)$=1.85, p=0.09), hence the luxury image attributes, self-congruence, and purchase intention. Separate univariate ANOVA's revealed a significant effect of the number of items on quality ($F(1,148)$=6.68, p=.01). Presenting one sneaker (M=5.29, SD=.75) significantly increased quality perception compared to when three items (M=4.98, SD=.73) were presented. Furthermore, a marginal effect exists for the number of items on perceived price value ($F(1,148)$=3.53, p=.06). Presenting one shoe marginally increases price value (M=227.75, SD=108.47) compared to when three shoes are presented (M=198.03, SE=86.69). Although this study focusses on the main effects of the stimuli, literature indicated price can be a result of quality perceptions since higher quality could imply higher value (Hennigs et al., 2012; Mortelmans, 2005), therefore mediation analysis using PROCESS was performed. The analysis showed significant evidence for quality mediating the effect of number of items on the perceived value of the product (Z=1.95 , p=.05) (See Figure 10, and Table 11 in Appendix 3.3).

No significant effect on the outcome variables were found for the use of spotlight (Λ=.97, $F(6,143)$=.63, p=0.70), and the use of a glass case or not (Λ=.98, $F(6,143)$=.60, p=0.73). Furthermore, since no main effects were found for the dependent variables on purchase intention, the mediation of luxury image and self-congruence on purchase intention could not be investigated for all factors.

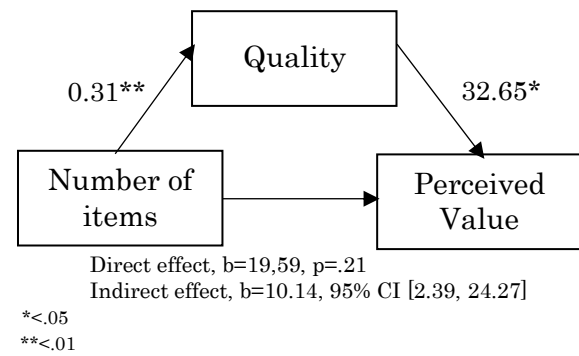Results, thus do support hypothesis 1b and 1 d. Yet, hypothesis 1a, 1c, 2-8, and 13 were not supported.

Direct effect, b=19,59, p=.21
Indirect effect, b=10.14, 95% CI [2.39, 24.27]
*<.05
**<.01

Figure 10: Model of Number of Items as a predictor of Perceived Value, mediated by Quality.

4.2 Interaction Effects

It is also investigated if the factors interact with each other (Again, see Table 4 for the Multivariate results, and Table 5 for the Univariate results).

MANOVA results indicated no significant effect on the outcome variables for all two-way and three-way interactions. Overall data thus do not show significant interaction effects between the number of items presented, spotlight use or not and use of a glass case or not, on luxury image attributes or purchase intention. These results reject hypothesis 4 and 8, which proposed that the more museum techniques were implemented in the display the more positive perceived luxury image and purchase intention would be.

4.3 Moderation

MANCOVA is performed to investigate the moderating effect of shopping motivation, desire to consume unique products and need for touch. These variables are added as covariates in separate MANCOVA's to indicate their possible moderation of the relationship between the dependent and independent variables. Table 6 indicates the results from MANCOVA. For the analysis these were also compared to the MANOVA results in table 4, to indicate if including the covariate led to significant changes in the effects of the stimuli.

Shopping Motivation was first included as a covariate. The results showed no significant effect and change in the effects of either number of items (Λ=.93, $F(6,142)$=.93, p=.12), spotlight (Λ=.98, $F(6,142)$=.57, p=.75) or glass case (Λ=.97, $F(6,142)$=.65, p.=.69) on the outcome variables after controlling for the effect of shopping motivation. There is thus no indication for shopping motivation moderating the relationship between the independent and dependent variables.

The Desire to Consume Unique products was then included in the analysis as a covariate. Again, the stimuli showed no significant changes in the effects stimuli could have on the outcome variables in the condition of spotlight (Λ=.93, $F(6,142)$=.60, p=.60) and a glass case (Λ=.97, $F(6,142)$=.59, p=.74) after controlling for the effect of desire to consume unique products. For the number of items the effect on the outcome variables previously found marginally significant, now slightly decreased (Λ=.98, $F(6,142)$=1.84, p=.10) after controlling for the desire to consume unique products. These results indicate that the desire to consume unique products also does not moderate the relationship between any of the stimuli and the outcome variables.

Finally, need for touch was added as a covariate in the effect of use of a glass case or not on the outcome variables. The effect of use of a glass case or not on the outcome variables is not significant after controlling for need for touch (Λ=.98, $F(6,148)$=.57, p=.75),. Data do thus not support Need for Touch moderating the relationship between a glass case and the outcome variables.

These results thus reject hypothesis 10-12.

Table 6 Overview Multivariate Results for Moderation effects

	Λ	df	F	p	η^2
Shopping Motivation	.86	6,142	3.92	<.01	.14
- Number of Items	.93	6,142	.93	.12	.07
- Spotlight	.98	6,142	.57	.75	.02
- Glass	.97	6,142	.65	.69	.03
Desire to Consume Unique products	.81	6,142	5.71	<.01	.19
- Number of Items	.93	6,142	1.84	.10	.07
- Spotlight	.97	6,142	.76	.60	.03
- Glass	.98	6,142	.59	.74	.02
Need for Touch	.98	6,148	.49	.82	.02
- Glass	.98	6,148	.57	.75	.02

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4.4 Overview of Results

Now all results are known, table 8 gives an overview of the supported/rejected hypotheses.

Table 8 Overview Hypotheses

	Hypotheses	S/NS
1	Displaying only one item (vs. three) on the pedestal will positively influence perceived luxury image, in terms of the perceived	
	a) exclusiveness	NS
	b) quality,	**S***
	c) aesthetics,	NS
	d) price.	**S****
2	Displaying the items on the pedestal under a spotlight (vs. no spotlight) on the pedestal will positively influence perceived luxury image, in terms of the perceived	
	a) exclusiveness	NS
	b) quality,	NS
	c) aesthetics,	NS
	d) price.	NS
3	Displaying the items on the pedestal under a glass case (vs. no glass case) on the pedestal will positively influence perceived luxury image, in terms of the perceived	
	a) exclusiveness	NS
	b) quality,	NS
	c) aesthetics,	NS
	d) price.	NS
4	The more museum display techniques, (thus single item, glass casing and spotlight) are incorporated in the product display the more positive perceived luxury image will be, in terms of perceived	
	a) exclusiveness,	NS
	b) quality,	NS
	c) aesthetics	NS
	d) price.	NS
5	Displaying only one item (vs. three) on the pedestal will positively influence purchase intention.	NS
6	Displaying the items on the pedestal under a spotlight (vs. no spotlight) on the pedestal will positively influence purchase intention.	NS
7	Displaying the items on the pedestal under a glass case (vs. no glass case) on the pedestal will positively influence purchase intention.	NS
8	The more museum display techniques, (thus single item, glass casing and spotlight) are incorporated in the product display, the more positive the effect will be on purchase intention.	NS
9	The effect of the use of substantive staging techniques on purchase intention, is mediated by the luxury image attributes	
	a) exclusiveness,	NS
	b) quality,	NS
	c) aesthetics	NS
	d) price.	NS
10	The effects of the product display on	
	a) exclusivity;	NS
	b) quality;	NS
	c) aesthetics;	NS
	d) price;	NS
	e) purchase intention,	NS
	is moderated by an individual's shopping motivation, i.e. the evaluation of hedonic shoppers will be more positive than utilitarian shoppers.	
11	The effects of the product display on	
	a) exclusivity;	NS
	b) quality;	NS
	c) aesthetics;	NS
	d) price;	NS
	e) purchase intention,	NS
	is moderated by an individual's need for unique products, i.e. the effect is more positive for people with a high need for unique products than on with low need for unique products.	
12	The effects of the use of <u>a glass case</u> in the product display on	
	a) Exclusivity;	NS
	b) Quality	NS
	c) Aesthetics	NS
	d) Price;	NS
	e) Purchase intention	NS
	is moderated by an individuals need for touch, i.e. autotelic NFT's will be more negative towards the product than instrumental NFT's.	
13	The effects of the product display on purchase intention is mediated by self-congruity with the product.	NS

*Significant at a level of .05
** Significant at a level of .10

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5. Discussion

This study investigated if the use of certain display techniques adopted from museums positively impacted the perceived luxury image of the product and purchase intention. The display techniques investigated were one or three shoes displayed, use of a spotlight and use of a glass case over the shoe or not. Eight conditions were created in a virtual reality experience and evaluated by respondents on perceived exclusiveness, quality, aesthetics, perceived value, self-congruity and their purchase intention. General shopping motivation, desire for unique products, and need four touch were investigated for their moderating role, as well as demographic variables age and gender. This section discusses the results of the study, followed by the theoretical and practical implications of these results. The limitations of this study and suggestions for future research are then discussed, followed by a conclusion.

5.1 Results

The marginal findings in this study indicate that presenting one item, instead of three, has a more positive effect on quality perceptions, and a marginal effect on perceived price value. In fact, quality is indicated to mediate the effect of number of items presented on perceived price value. In line with expectations, it was confirmed that presenting a product singular from the rest creates a positive contrast, resulting in higher quality and price value perceptions. Research stated that luxury is related to technical superiority and price premiums (Dion & Arnould, 2011; Hudders et al., 2013; Mortelmans, 2005), and presenting one sneaker (versus three) is thus more effective for conveying these attributes. Furthermore, these results confirm that quality and price premiums are related (Hudders et al., 2013; Stock & Balachander, 2005) as the price is also the result of quality of the material and craftsmanship (Hennigs et al., 2012; Mortelmans, 2005), which explains why quality perceptions were found to mediate price value perceptions. No main effects were found for number of items on exclusivity, aesthetics, and purchase intention.

For the use of spotlight and a glass case no main effects were found on the outcome variables. The use of a spotlight thus not highlights the product as much as expected in order for it to communicate luxury attributes and elicit desire. Furthermore, using a glass case to limit the sensory experience does not create a desire as expected, nor does it increase the perceptions luxury. The difference between the effects found or not, could be explained by the extent to which they were noticed, as number of items were most clearly noticed.

Furthermore, no interaction effects between the stimuli were found. Since environmental cues are evaluated together to form perceptions and impact evaluations (Bitner, 1992; Forrest, 2013; Mattila & Wirtz, 2001) it was expected that a combination of the cues would have a stronger impact on luxury image and purchase intention. Yet, the fact that interaction effects were not found indicates that using the stimuli together in a product display, regardless of the combination, does not enhance the effects.

Consumer needs were also expected to impact consumer evaluations. Yet, no significant results were found for shopping motivation and desire to consume unique products to moderate the effects of the stimuli on the outcome variables. It was expected that since luxury goods offer unique (Mortelmans, 2005) and hedonic value to consumers (Kapferer, 1997; Vigneron & Johnson, 2004) that people with a higher desire for unique products, or a hedonic shopping motivation (compared to utilitarian) would be more receptive by and thus positively influenced by the cues. Yet, no moderation effects were found. However, this could indicate that the result that the stimuli do not have the desired effect, holds despite the consumers' needs in regard to their desire to consume unique products or shopping motivation.

Finally, the results of this study rejected need for touch to moderate the relationship between the use of a glass case or not and the outcome variables. Although a previous study by Grohmann et al. (2007) did find an interaction effect between the use of a glass case, quality perceptions and need for touch, this study could not replicate this result. Nor was it able to add results by need for touch also moderating the impact of a glass case or not on the evaluation of the other luxury image attributes (exclusiveness, aesthetics, and perceived value). Yet, the effects of using a glass case on luxury image attributes were insignificant regardless of the need for touch.

In conclusion, although retailers apply museum display techniques in an attempt to differentiate items (Pine & Gilmore, 1998), induce adoration for it (Dion & Arnould, 2011) and communicate and inherit appropriate associations, these techniques thus not have the desired effect.

5.2 Limitations and suggestions for future research

Next to results this study also has its limitations, which also inspire improvements for future research. These are now discussed.

First off, the effects of the display techniques rely on the fact that people have to subconsciously link it to a museum display. However, young people might not go to museums that often, and therefore might not be able to form this link. This study ignored the fact if people have pre-existing knowledge regarding these displays and if they connect this to a museum, which could also have impacted the results.

A study in Virtual Reality might enable people to experience a store and avoid bias, yet, the results are not as significant as expected. Virtual Reality might still not be realistic enough, and not as similar to an experience in a real store. This could be especially relevant for an experiment in which the sensory experience is limited by a glass case. It might have been too difficult for the respondents to actually experience their senses being limited in a Virtual Reality simulation. Especially, since tactile input was found to be important for luxury products to reduce the level of uncertainty (Grohmann et al., 2007). Therefore, it might be useful to repeat this study in a more realistic setting. In that way, also impact on approach of avoidance behaviour towards the product display could be observed.

Furthermore, this study used sneakers as a product to investigate the effect of the museum display techniques. For most people, sneakers are probably a generic product and something they do not relate to luxury. The choice for using a sneaker store and a sneaker as a luxury product to this extent might still be too much related to a subculture. Also, the design of the sneakers used in the environment are inspired by Basketball trainers, a sport that is less popular in Europe making it less relatable for the respondents. Altogether, these might have affected the results and therefore it is useful for future studies to use more generic sneaker designs as worn in Europe, or repeat the study with other more common goods.

Studies show that people not only respond cognitively to a product display but also emotionally (Bitner, 1992; Forrest, 2013). However, affect is not included in the study. Affective response to a product display using museum display techniques might be useful to include in future studies since it can also impact responses.

The sample mostly represented highly educated people, of whom the majority is still a student. The sample is thus not representative of society. Therefore, future studies should make sure to have a more demographically representative sample of society. In the case of the subject of luxury products, the fact that the majority was students not only affects the representativeness of the sample, but can also affect responses since luxury is not (yet) in their close interest.

5.3 Implications
5.3.1 Theoretical implications

As said in the introduction, the museum servicescape itself is quite a new field in the field of environmental research. The effects of these product displays are inferred rather than empirically tested. This study explores the use of the display techniques and adds to this quite new field of study.

This study adds to the field of environmental design by investigating the effects of these museum display techniques in the luxury retail environment. A study by (Grohmann et al., 2007) has investigated the use of a glass case and quality perceptions, yet to my knowledge no study has combined the different display techniques used in this study, making this study unique. Thus presenting the field of environmental design, and specifically the retail servicescape, with new knowledge on these factors, the number of items presented, use of a spotlight, and a glass case in a product display.

Furthermore, the effects were investigated on their effects on luxury image and purchase intention sneakers, which also adds new knowledge on the use cues in the environment to enhance luxury image and elicit purchase intention.

5.3.2 Practical implications

For, practice lending display techniques from a different service environment to inherit appropriate associations comes with a risk. Not in the first place since the museum servicescape is quite different and their object presentation is also subject to changes.

The outcome of this study indicates that the use of these techniques does not have the significant impact on luxury brand image and purchase intention of sneakers, as the luxury brands and retailers intend to communicate. The biggest impact is by displaying a product solely, making a product look more superior than other products in terms of quality and perceived value. So to highlight more superior products in a collection, it is useful to present those items separate from other merchandise.

However, the use of glass and spotlights do not have the desired effect, and using the stimuli together also does not enhance perceptions and purchase intention. These effects hold regardless of the needs the consumer has. Therefore, retailers should really think the use of these techniques through and make a deliberate choice.

5.4 Conclusion

The aim of this study was to investigate if a sneaker is perceived as more luxurious when presented in different product display designs (hence one or among three items, under a spotlight or not and under a glass case or not) and if this impacts purchase intention. A 2x2x2 experimental design was carried out to answer:

> to what extent product displays using museum display techniques (1/3 items; glass case/no glass case; spotlight; no spotlight) contribute to the luxury image of sneakers? And does this ultimately affect purchase intention?

This study was carried out through a Virtual Reality experiment using eight different conditions, followed by a questionnaire about relevant constructs. The dependent variables being the number of shoes, use of spotlights or not or use of a glass case or not were investigated on their effect on the luxury image attributes and purchase intention of sneakers. Whereas luxury image attributes were operationalized by the constructs exclusivity, quality, aesthetics and price value.

The number of items presented on the display did have a significant effect on quality perceptions, and a marginal effect on price value. This indicates that presenting one item is more effective in communicating these attributes, compared to when three items are presented. Unfortunately, the remaining outcomes showed no significant main or interaction of the number of shoes, use of spotlights, and/or use of glass cases on luxury image and purchase intention.

Furthermore, no moderating effects were found for gender, age, shopping motivation, desire to consume unique products and need for touch. The effect of the stimuli thus does not depend on individual consumer needs.

In conclusion, these results add to the existing body of empirical research, are useful for practice and could inspire future empirical research.

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APPENDIX
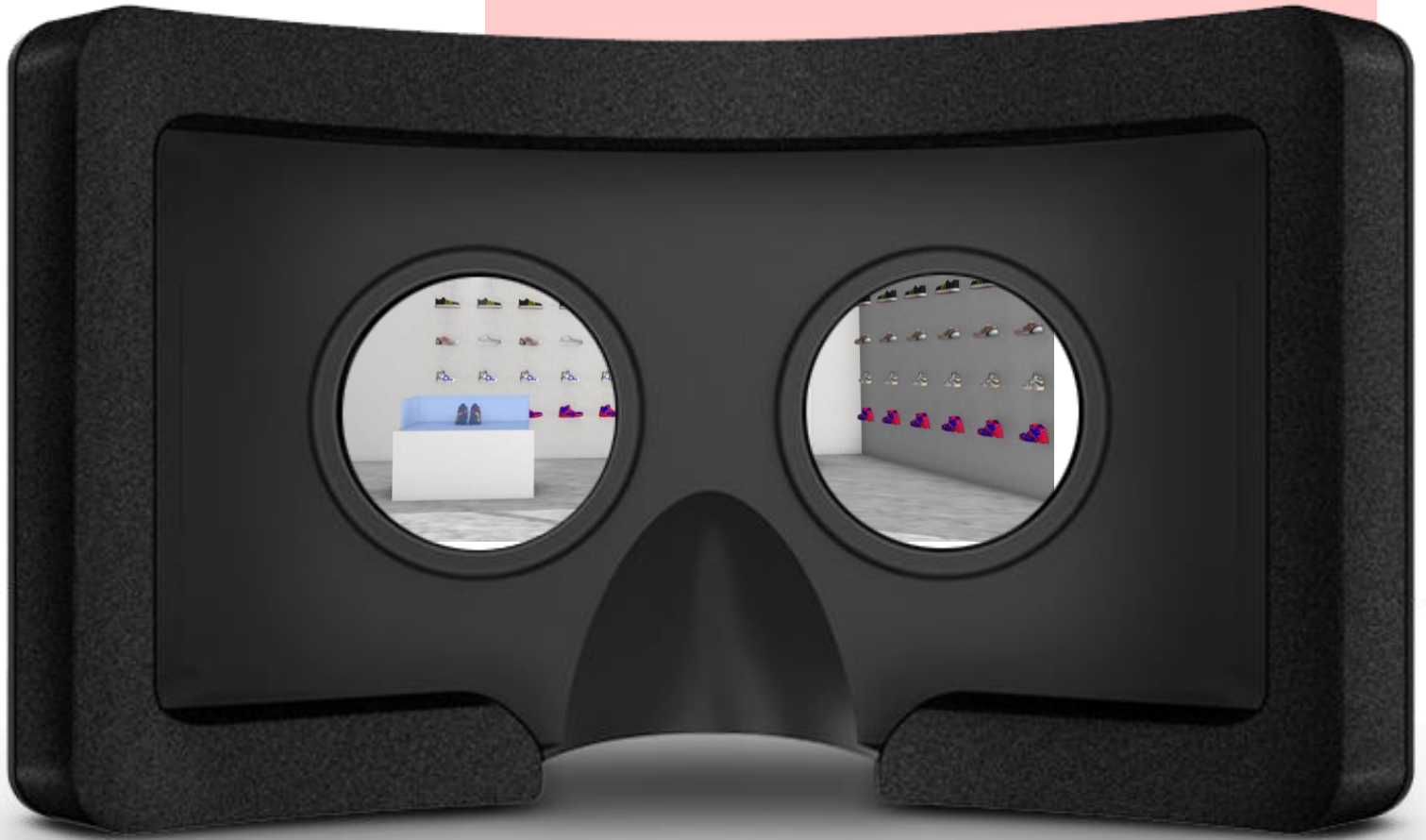
Appendix 1 – Stimuli Main Study

Condition 1: Three Items x No Glass Case x No Spotlight

Condition 2: Three Items x No Glass Case x Spotlight
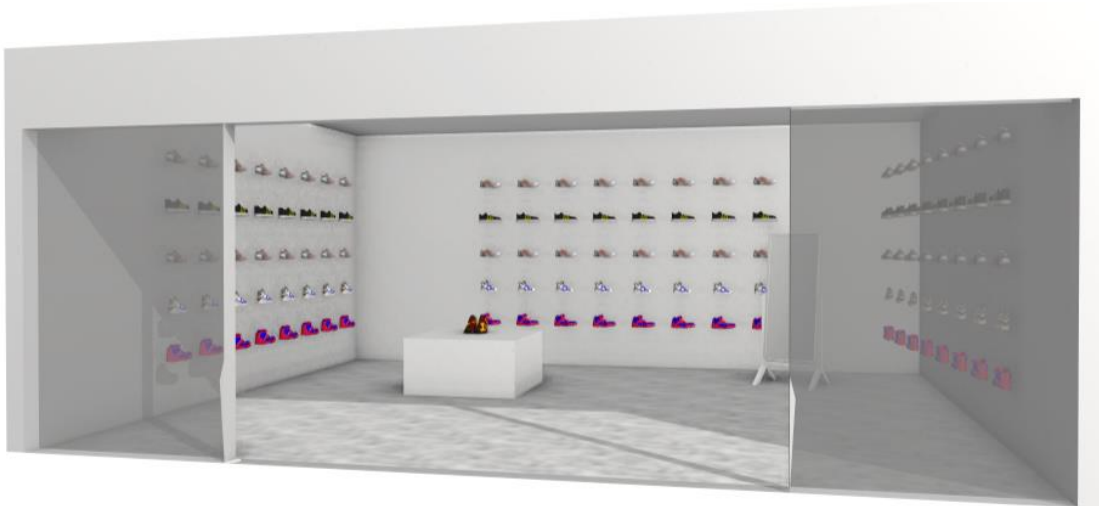

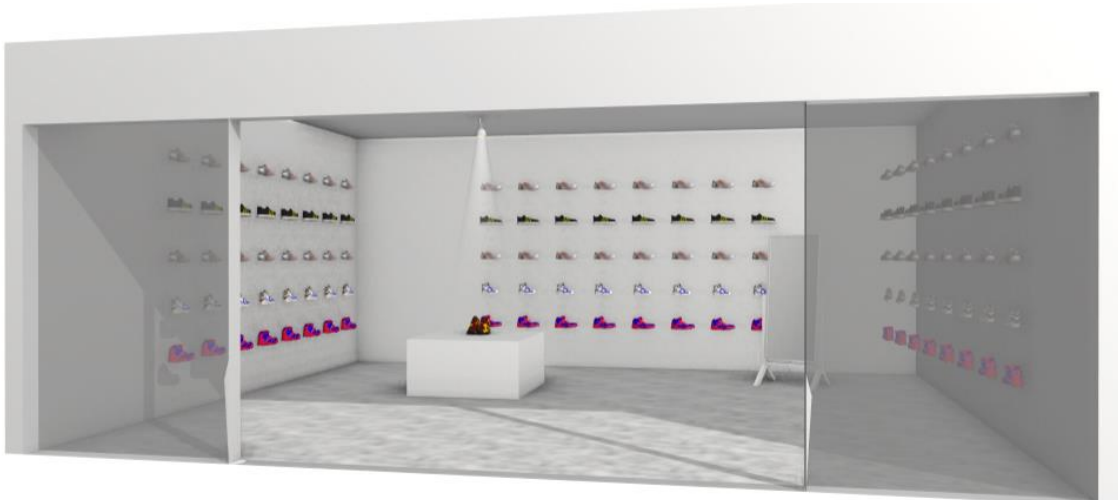Condition 3: Three Items x Glass Case x No Spotlight

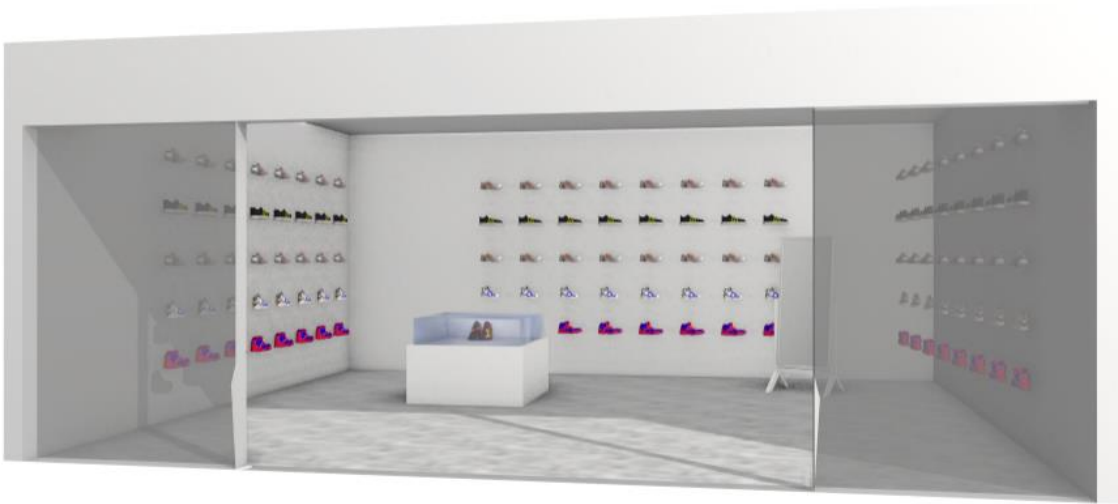Condition 4: Three Items x Glass Case x Spotlight

Condition 5: One Item x No Glass Case x No Spotlight

Condition 6: One Item x No Glass Case x Spotlight

Condition 7: One Item x Glass Case x No Spotlight

Condition 8: One Item x Glass Case x Spotlight

Appendix 2 – Questionnaire

Hi!

My name is Kirsten van Beuzekom, and I am a Communication Science student at the University of Twente. I am conducting this experiment as part of my Master Thesis.

This study investigates the effect of a store environment on consumer perceptions of products.

This research will include a Virtual Reality experience of a store environment, followed by a set of questions. The experiment will take around 10 minutes.

The data are collected anonymously. Only the researchers have access to the responses.

Additionally, your participation in this research is entirely voluntarily. It is your choice whether you participate or not.

However, by participating in this research it is possible to earn SONA points. Also there is a lottery among all participants to win gift cards, there are three gift cards available each worth € 10,- . In the case of the latter, please do not forget to leave your email at the end of the questionnaire in order to participate.

If, by any reason, you feel uncomfortable and want to stop this experiment, please feel free to do so and notify the researcher.

If you have any questions about this research, you can ask the researcher now or email her later on k.w.vanbeuzekom@student.utwente.nl

Please confirm that you have read the above information, and agree to take part in this study.
- ○ Yes, I consent to take part in this study
- ○ No.

SCENARIO

You will be presented a Sneaker store in Virtual Reality. Feel free to look around as long as you like. When you feel you have seen enough of the store, please note the researcher before you take of the glasses.

Imagine that you are looking for a pair of sneakers. You have ended up in this Sneaker Store. Now you are looking around to get an impression of the store, to see if this store is able to help you. Afterwards, you will be asked to answer some questions about the pair presented on the middle of the pedestal.

Please indicate to what extent you think the following concepts are capable of describing **the product presented** in the display, from "strongly disagree" to "strongly agree".

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The product is rare	O	O	O	O	O	O	O
The product is expensive	O	O	O	O	O	O	O
The product is unique	O	O	O	O	O	O	O
The product is extravagant	O	O	O	O	O	O	O
The product is exclusive	O	O	O	O	O	O	O
The product is unattainable	O	O	O	O	O	O	O

Please indicate to what extent you think the following concepts best describe **the quality of the product presented.**

Poor Quality	O	O	O	O	O	O	O	Excellent Quality
Inferior Product	O	O	O	O	O	O	O	Superior Product
Poor Craftmanship	O	O	O	O	O	O	O	Great Craftmanship
Worse than average product	O	O	O	O	O	O	O	Better than average product
Exceptional Merchandise	O	O	O	O	O	O	O	Ordinary Merchandise
Weak Construction	O	O	O	O	O	O	O	Durable construction
Very little attention to details	O	O	O	O	O	O	O	A lot of attention to details
Very good fabric	O	O	O	O	O	O	O	Poor fabric
Won't last a long time	O	O	O	O	O	O	O	Will last a long time

Please indicate to what extent you think the following concepts are capable of describing **the product presented** in the display, from "strongly disagree" to "strongly agree".

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The product is stylish	O	O	O	O	O	O	O
The product is sophisticated	O	O	O	O	O	O	O
The product is innovative	O	O	O	O	O	O	O
The product is comfortable	O	O	O	O	O	O	O
The product is made by hand	O	O	O	O	O	O	O
The product is creative	O	O	O	O	O	O	O

How much do you think the product displayed approximately costs?

Inexpensive											Expensive
50	100	150	200	250	300	350	400	450	500	550	600	650

I think the sneakers cost around

Please indicate to what extent you agree on the following statements, from "strongly disagree" to "strongly agree".

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I find this product very interesting.	O	O	O	O	O	O	O
I would like to own this product.	O	O	O	O	O	O	O
My evaluation of this product is very negative.	O	O	O	O	O	O	O
I don't see myself purchasing this product anytime soon.	O	O	O	O	O	O	O
I would consider buying this product.	O	O	O	O	O	O	O

Please indicate to what extent you agree on the following statements, from "strongly disagree" to "strongly agree".

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The sneaker is consistent with how I see myself.	O	O	O	O	O	O	O
The sneaker would help me express who I am.	O	O	O	O	O	O	O
The sneaker is consistent with how I like to see myself.	O	O	O	O	O	O	O
The sneaker reflects how I like to be perceived.	O	O	O	O	O	O	O
Others would think this sneaker fits my personality.	O	O	O	O	O	O	O

Without having a look at the Virtual Environment again, I would like to ask you some questions about what you have noticed.

Did the pedestal carry a glass case over the sneakers?
O Yes
O No
O I cannot remember

How many shoes were there on the pedestal
O 1
O 3
O 5

Was there a spotlight aimed on the pedestal?
O Yes
O No
O I cannot remember

Now, I would like to know something about you.

The following section starts off with some demographic questions, followed by questions regarding your personal shopping behaviour.

What is your age?

_____

What is your gender?
O Male
O Female
O Non-conforming

What is the highest degree or level of school you have completed?
If currently enrolled, please indicate the highest degree received in the form of a diploma.
O No education
O Primary School
O High School (VMBO)
O High School (HAVO)
O High School (VWO/Gymnasium)
O Middle level Applied Education (MBO)
O University of Applied Sciences (HBO)
O Bachelor of Science
O Master of Science
O Professional Degree
O Doctorate Degree

What is your employment status, are you currently … ?
O Part-time employed for wages
O Full-time employed for wages
O Self-employed
O Currently out of work
O A homemaker
O A student
O Retired
O Unable to work

What is your income?
O Below average (less than €10.000,-)
O Average (between €10.000,- and €30.000,-)
O More than average (between €10.000,- and €30.000,-)
O I'd rather not say

Are you color blind?
O Yes
O No

Now for the last part of this study, I would like to ask you to evaluate some statements regarding the way you generally prefer to do your shopping (for retail items such as clothes and shoes).

Please indicate to what extent you agree on the following statements, from "strongly disagree" to "strongly agree".
Note: shopping refers to shopping for retail items such as clothes and shoes.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Shopping for me is truly a joy.	O	O	O	O	O	O	O
I go shopping because I want to.	O	O	O	O	O	O	O
When I go shopping I only want to purchase in what I planned to.	O	O	O	O	O	O	O
Shopping for me truly feels like an escape.	O	O	O	O	O	O	O
Shopping for me is a necessity.	O	O	O	O	O	O	O
When I go shopping, I want to complete my shopping as soon as possible.	O	O	O	O	O	O	O
Compared to other things that I could do, time spent shopping is truly enjoyable.	O	O	O	O	O	O	O
Shopping for me is not a nice time out.	O	O	O	O	O	O	O
I enjoy being busy with exciting new products.	O	O	O	O	O	O	O
When I go shopping I have a good time, because I am able to act on the "spur-of-the-moment".	O	O	O	O	O	O	O
I enjoy shopping for its own sake, not for what Items I purchase.	O	O	O	O	O	O	O
When I go shopping, I feel the excitement of the hunt.	O	O	O	O	O	O	O
While shopping, I forget my problems.	O	O	O	O	O	O	O
I am disappointed, when I need to visit multiple stores to buy what I need.	O	O	O	O	O	O	O
Shopping feels like an adventure to me.	O	O	O	O	O	O	O
Generally, I only buy what I need when I go shopping.	O	O	O	O	O	O	O

Please indicate to what extent you agree on the following statements, from "strongly disagree" to "strongly agree".
Note: shopping refers to shopping for retail items such as clothes and shoes.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I am very attracted to rare objects.	O	O	O	O	O	O	O
I tend to be a fashion leader rather than a fashion follower.	O	O	O	O	O	O	O
I am more likely to buy a product if it is scarce.	O	O	O	O	O	O	O
I would prefer to have things custom-made than to have them ready-made.	O	O	O	O	O	O	O
I enjoy having things that others do not have.	O	O	O	O	O	O	O
I rarely withhold myself from the opportunity to order custom features on the products I buy.	O	O	O	O	O	O	O
I like to try new products and services before others do.	O	O	O	O	O	O	O
I enjoy shopping at stores that carry merchandise that is different and unusual.	O	O	O	O	O	O	O

x

Please indicate to what extent you agree on the following statements, from "strongly disagree" to "strongly agree".
Note: again shopping refers to shopping for retail items such as clothes and shoes.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
When walking through stores, I can't help touching all kinds of products.	O	O	O	O	O	O	O
Touching products can be fun.	O	O	O	O	O	O	O
I place more trust in products that can be touched before purchase.	O	O	O	O	O	O	O
I feel more comfortable purchasing a product after physically examining it.	O	O	O	O	O	O	O
When browsing in-stores, it is important for me to hold all kinds of products in my hands.	O	O	O	O	O	O	O
If I can't touch a product in the store, I am hesitant to purchase the product.	O	O	O	O	O	O	O
I like to touch products even if I have no intention of buying them.	O	O	O	O	O	O	O
I feel more confident making a purchase after touching a product.	O	O	O	O	O	O	O
When browsing in-stores, I like to touch lots of products.	O	O	O	O	O	O	O
The only way to make sure a product is worth buying is to actually touch it.	O	O	O	O	O	O	O
There are many products that I would only buy if I could hold them in my hands before purchase.	O	O	O	O	O	O	O
I find myself touching all kinds of products in-stores.	O	O	O	O	O	O	O

Thank you very much for your participation.

Appendix 3 – Results

3.1 Sample Distribution

Table 9 Distribution of Experimental Conditions in relation to the Demographics.

	Experimental Conditions							
	1	2	3	4	5	6	7	8
	3/NS/NG	3/S/NG	3/G/NS	3/G/S	1/NS/NG	1/S/NG	1/G/NS	1/G/S
Total N	19	19	20	19	20	20	20	19
Gender								
Male	12	4	10	10	8	5	6	5
Female	7	15	10	9	12	15	14	14
Education								
Havo	0	0	1	1	1	0	1	1
VWO/Gymnasium	11	15	12	12	13	13	15	11
HBO	1	1	1	1	3	3	0	2
Bachelor of Science	7	3	4	2	3	3	4	5
Master of Science	0	0	2	3	0	1	0	0
Employment Status								
Part-time employed	0	0	1	1	1	0	0	2
Full-time employed	1	0	2	0	1	3	0	1
Self-employed	0	0	1	1	0	0	0	0
Currently out of work	1	0	0	1	0	0	0	0
Student	17	19	16	16	18	17	20	16
Income Level								
Below Average	14	12	16	16	17	16	19	14
Average	3	1	0	1	0	2	1	2
Above Average	1	0	2	1	1	1	0	0
I'd rather not say	1	6	2	1	2	1	0	3

*For the experimental conditions abbrevations are used: The number of items are indicated by either "3" or "1". Spotlight use is indicated by "S" and no use of spotlight is indicated by "NS". The use of a Glass Case is indicated by "G" and no use of a glass case is indicated by "NG"

3.2 Factor Analysis
3.2.1 KMO-analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,771
Bartlett's Test of Sphericity	Approx. Chi-Square	6808,985
	df	2278
	Sig.	,000

3.2.2 Factor Analysis

Table 10 Final construct, items and loadings from Factor Analysis

Items per Construct	Loadings
Exclusiveness	
The product is extravagant	.755
The product is expensive	.667
The product is exclusive	.539
Quality	
Poor Quality – Excellent Quality	.703
Poor Craftmanship – Great Craftmanship	.688
Won't last a long time – Will last a long time	.657
Weak construction – Durable construction	.626
Worse than average product – Better than average product	.540
Inferior product – Superior product	.495
Aesthetics	
The product is sophisticated	.711
The product is innovative	.519
Purchase Intention	
My evaluation of this product is very negative (-, recoded)	.597
I find this product very interesting	.565

Self-Congruence	
The sneaker is consistent with how I like to see myself	.877
The sneaker reflects how I like to be perceived	.854
The sneaker is consistent with how I see myself	.804
The sneaker would help me express who I am	.801
Others would think this sneaker fits my personality	.769
Shopping Motivation	
Shopping for me is not a nice time out (-, recoded)	.857
Shopping for me is truly a joy	.845
Compared to other things that I could do, time spent shopping is truly enjoyable	.829
When I go shopping, I want to complete my shopping as soon as possible (-, recoded)	.818
I go shopping because I want to	.810
Shopping for me truly feels like an escape	.778
Generally, I only buy what I need when I go shopping (-, recoded)	.757
When I go shopping I have a good time, because I am able to act on the "spur-of-the-moment".	.710
When I go shopping, I feel the excitement of the hunt	.705
Shopping feels like an adventure to me	.682
Desire to Consume Unique Products	
I enjoy having things that others do not have.	.757
I am more likely to buy a product if it is scarce.	.678
I am very attracted to rare objects.	.662
I would prefer to have things custom-made than to have them ready-made.	.618
I tend to be a fashion leader rather than a fashion follower.	.596
I like to try new products and services before others do.	.588
I rarely withhold myself from the opportunity to order custom features on the products I buy.	.585
I enjoy shopping at stores that carry merchandise that is different and unusual.	.585
Need for Touch	
Autotelic NFT	
When browsing in-stores, I like to touch lots of products.	.899
I find myself touching all kinds of products in-stores.	.862
When walking through stores, I can't help touching all kinds of products.	.860
Touching products can be fun.	.812
I like to touch products even if I have no intention of buying them.	.743
When browsing in-stores, it is important for me to hold all kinds of products in my hands.	.650
Instrumental NFT	
I feel more comfortable purchasing a product after physically examining it.	.787
I feel more confident making a purchase after touching the product.	.775
I place more trust in products that can be touched before purchase.	.728
If I can't touch a product in the store, I am more hesitant to purchase the product.	.616

3.3 Process Results

3.3.1 Mediator Analysis

Table 15 Overview of Process results to investigate mediation of quality on the effects of the number of items on perceived price value.

	b	SE	t(158)	p
Number of Items as a Predictor of Price	29.73	15.75	1.88	.06
Quality as a predictor of Price	.31	.12	2.60	.01
Quality controlling effects on Price	32.65	10.36	3.15	<.01
Number of Items as a Predictor of Price, in presence of Quality	19.59	15.64	1.25	.21