

RESEARCH

Open Access



Product experiences of clothing attachment in baby boomers in the United States

Lina M. Ceballos^{1*}  and Seoha Min²

*Correspondence:

lceball4@eafit.edu.co

¹ Associate Professor,
Department of Marketing,
Universidad EAFIT, Carrera
49 # 7 sur - 50, Medellín,
Antioquia, Colombia
Full list of author information
is available at the end of the
article

Abstract

Despite the importance of the baby boomer generation, there is relatively scarce research focused on that consumer group. Based on the framework of product experience, this study explores the experiences of older baby boomers associated with consumer-clothing attachment. The interpretive approach utilized in-depth interviews with 18 older baby boomers born between 1946 and 1955 to enquire about their experiences with attached clothing. Participants were asked to bring to the interview photographs of the clothing they had become more attached to. Findings indicate that the experiences of older baby boomers with attached clothing are mainly created, developed, and maintained via all three dimensions of product experience; aesthetic properties of the product, positive emotions triggered by the product, and the symbolic and instrumental meanings associated with the product. However, the aesthetic properties and positive emotions related to those products were bound to its assigned meanings. Meaning varied and was classified as associations with: identity or the belief that the object is a self-extension; memories or the connection with the past; social standing or sense of status; and strong associations with utility. For all participants, the stronger the experience of meaning with a specific product, the stronger the level of attachment towards that product. This qualitative investigation extends the understanding of the framework of product experience and the concept of consumer-clothing attachment. Contributions offer opportunities to marketers and designers who seek to better understand the experiences behind baby boomers' clothing attachment.

Keywords: Baby boomers, Product experience, Attachment, Clothing, Consumers, Meaning, Aesthetics, Emotions

Introduction

Baby boomers represent a spike in births during the 19-year period from 1946 to 1964 in the U.S. (Wolf et al. 2014). The latest population estimation indicated that the number of baby boomers in the U.S. will reach 73 million by 2019 (U.S. Census Bureau 2017). When compared to other generations, their relevance is still significant. As of 2017, the greatest generation (born before 1928) had 2.11 million individuals; the silent generation (born 1928–1945) had 24.44 million, the baby boomer generation had 72.56 million, generation X (born 1965–1980) had 65.45 million, the millennial generation had 72.06 million, and generation Z (born after 1997 and later) had 90.55 million individuals (Duffin 2019).

As the baby boomers makes up the second largest generation in the U.S. after generation Z, multiple scholars have explored their characteristics as consumers.

Academic research on this generation has enquired about their responses to active wear apparel advertisements (Wray and Hodges 2008), attitudes on fair trade apparel (Littrell et al. 2005), fashion behavior (Peters et al. 2011), among other topics of interest. Findings argue that baby boomers have a greater focus on qualities of apparel like comfort, value, and quality, as well as preference for authentic products and ethnic attire when compared to younger generations (Littrell et al. 2005). Moreover, an academic exploration on women over 50 years old argues that researchers need to better understand perceptions of baby boomers in order to successfully market apparel products directly to them (Wray and Hodges 2008). Despite the significance of this cohort, as well as their increasing life expectancy (Roser et al. 2019), there has been little reported research concerning their identities and consumption needs in the field of consumer research (Colby and Ortman 2015). In particular, research regarding fashion of baby boomers is sparse (Peters et al. 2011) and there is relatively scarce qualitative research concentrating in the baby boomer consumer group (Moschis 1994, 2012).

To this end, the purpose of the study is to explore baby boomers' product experiences that are associated with consumer-clothing attachment. The later term relates to the emotional bond between a consumer and a specific product (Mugge et al. 2008). Based on the framework by Desmet and Hekkert (2007), the aesthetic, emotional, and meaningful dimensions of those product experiences are analyzed. This is pertinent as the aesthetics of a product, the emotions triggered by the interaction with that product, and its related meanings increase the attachment with the product (Mugge 2007). As clothing contains various meanings, such as symbolic meaning of one self (Solomon 1985), and the main determinant of product attachment is meaning (Mugge et al. 2008), exploration of baby boomers' clothing attachment will provide valuable understanding for this age cohort. Furthermore, other research on clothing attachment has only considered certain determinants, such as pleasurable use experiences and meaningful memories (Niinimäki and Armstrong 2013). Thus, this study is one of the first to consider all dimensions of product experience in the examination of clothing attachment.

Despite the significant amount of research on the topic of attachment, there is little published research on clothing attachment in particular, with some exceptions (e.g., Niinimäki and Armstrong 2013). For instance, Niinimäki and Koskinen (2011) explored the life cycle of clothing via clothing attachment, but they mainly focused on the role of the designer and not as much on the consumer. Nevertheless, when considering the significant role consumers have in the creation of clothing attachment, there is still much to learn from them in order to implement a consumer-focused product design that offers improvements in product lifetimes and ranges (Chandra and Kamrani 2003). Besides, creating new market offers that stimulate clothing attachment in consumers can serve as an "eco-friendly strategy to create long-lasting person-product relationships" (Mugge et al. 2008, p. 428) and a brand strategy to create products that help people "become the person they desire to be" (Zimmerman 2009, p. 395).

In addition, it would appear that baby boomers, out of all generations, may be the consumers in which this topic of attachment is more relevant. The reasons being that they were highly influenced by the scarcity of the post-World war II context in which they

were born into (Francis and Hoefel 2018) and they give high importance to “quality” in apparel products (Littrell et al. 2005). As a consequence, they may experience more product attachment than other generations and keep their products for longer. In contrast, generations Z (Francis and Hoefel 2018) and Y (i.e., millennials) (Goldman Sachs 2018) are less prone to be attached to possessions because they are more socially responsible by focusing on access (e.g., renting, sharing). As for generation Y, they have more fashion knowledge than previous generations (Noble et al. 2009), which implies that in their search for the latest trends, they may tend to keep products for a shorter time as compared to baby boomers. As a result, considering the significance of baby boomers in the topic of clothing attachment, provides opportunities to generate valuable contributions to academe in the field of clothing and textiles, as well as product design, along with practical suggestions for clothing designers and marketing managers of apparel brands targeting baby boomers. Thus, this study offers opportunities to designers and marketers who seek to better understand the experiences behind baby boomers’ clothing attachment.

Literature review

Baby boomers as consumers in the U.S

The term *baby boom* has been used to describe a substantial increase in baby births following World War II in the U.S. (Colby and Ortman 2015). Based on Reuteman (2010), the baby boomer generation can be segmented into two: the leading edge and echo baby boomers. The *leading edge baby boomers* are born between 1946 and 1955, those who came of age during the Vietnam War. The other half of the generation, called *echo baby boomers*, was born between 1956 and 1964. The focus of this research is in the former, the leading edge baby boomers, due to their significance as a consumer group. It is expected that around 60 million baby boomers will be between 66 and 84 years old by 2030 (Colby and Ortman 2015). With this tendency, baby boomers are expected to outnumber children by 2035 for the first time in the U.S. history (U.S. Census Bureau 2018). Not surprisingly, they have been identified as an important consumer group for fashion companies and advertising (Bereznha 2018).

Visa Incorporation reported that consumers older than 60 will continue to dominate consumer spending in the U.S. for the next 10 years (Best 2016). Coleman et al. (2006) reviewed marketing research articles dedicated to baby boomers to describe their status as consumers in the U.S. They indicated that most baby boomers are identified as significant consumers with disposable incomes who do shopping for necessities and luxury items for their family, including grandchildren, health supplies, and trips for themselves. Market research (Issar and Gupta 2008) adds that they are not particularly price sensitive, and many are willing to pay for high-quality goods.

Baby boomers have been identified by researchers as having unique characteristics in relation to fashion and textiles. Lövgren (2016) interviewed older women regarding their wardrobe to explore transitions and continuities during their life course. The participants indicated their strong preference for comfortable and practical clothing. Lee et al. (2012) explored older women’s concerns regarding clothing fit and style, as well as their attitudes toward emerging technology, such as 3D body scanning. They found that clothing fit was the most important consideration for older women when they make decisions

regarding apparel purchases. The literature in general has addressed female baby boomers' needs and concerns with clothing. Despite the efforts of academics in exploring baby boomers' unique experiences in relation to fashion and textiles, literature has focused on the perspective of female baby boomers only. In addition, there is limited research on their experiences associated with consumer-clothing attachment.

Product attachment to clothing

Attachment is a concept that has received considerable attention in academic research, especially in topics centered on consumption. Numerous terms have been used when addressing this concept in relation to objects, such as product attachment, material possession attachment, object attachment, and consumer-product attachment. The main difference in definitions has to do with the type of object that is involved in the experience of attachment. For instance, consumer-product attachment is the attachment experienced by a consumer with a durable product (Schifferstein and Zwartkruis-Pelgrim 2008), whereas material possession attachment is specific to a material object considered a possession that has been "psychologically appropriated, de-commodified, and singularized through person-object interaction" (Kleine and Baker 2004, p. 1). Even brands and services can be considered objects of attachment in the constructs of brand attachment (Park et al. 2010) and customer-service firm attachment (Moussa and Touzani 2013).

As "consumers own objects for the value they provide" (Richins 1994a, p. 504), there is a relation between product attachment and possession value in that product attachment is stronger when the value assigned to possessions involves considerations of irreplaceability (Richins 1994a, b). Besides, because an emotional bond cannot be created/sustained with products without character or an aesthetical appeal (Chapman 2005), it is expected that the physical appearance of products and the emotions generated during the interaction with those products play an important role in the creation and development of product attachment. For instance, a user often becomes more attached to a product with small marks and scratches, as these tell the history of use and strengthen the user's connection to the product (Niinimäki and Koskinen 2011; Schifferstein and Zwartkruis-Pelgrim 2008). More so if the object of attachment is a clothing possession because clothing is a significant social symbol that individuals often use to define and communicate their identity (Feinberg et al. 1992).

The focus for this research will be given to *clothing attachment*, defined as the strength of the emotional bond a consumer experiences with a specific clothing item (Mugge et al. 2008; Schifferstein et al. 2004). For the sake of clarity, when a consumer interacts with an attached product like clothing, affective responses in the consumer are triggered, such as emotions (Desmet and Hekkert 2007). An emotion is defined as "the felt tendency toward anything intuitively appraised as good (beneficial), or away from anything intuitively appraised as bad (harmful)" (Arnold 1960, p. 182). Emotions experienced with attached products can be, for example, joy and serenity. Whereas the emotional bond in attachment relates to a connection between the consumer and the product, the emotions provoked in the consumer during the interaction with the attached product are associated with feelings derived from the appraisal of the product.

The product experience of clothing

Desmet and Hekkert (2007) present the psychological responses to experiences with products via their Framework of product experience, which distinguishes three dimensions of product experience: (a) Aesthetic experience, (b) Emotional experience, and (c) Experience of meaning.

Aesthetic experience

As consumers prefer product appearances perceived as beautiful and enhancing their wellbeing (Bloch et al. 2003), an *aesthetic experience* is associated with the perception of beauty and delight with products through all the senses (Desmet and Hekkert 2007). This experience is related to the response to aesthetic characteristics of the product, or what Veryzer (1993) called, aesthetic response, which is “the reaction a person has to an object (e.g., product) based on his or her perception of the object” (p. 224). The experience with product aesthetics also affects the life expectancy of those products (Chapman 2005). Given that, the power of beauty is undeniable and product aesthetics drives consumer choice (Pol 2013), the product appearance is expected to strengthen the bond of an individual with a product, and therefore, increase product attachment.

The perception of a product and the aesthetic characteristics of its product form (i.e., number of elements that are mixed together when designers create the product) can lead to consumer response, such as evaluations or judgments by the consumer when observing the aesthetic properties of the product (e.g., aesthetic preference) (Bloch 1995). There is also an intricate relation among the aesthetic experience and the emotional experience because “perceiving the product is the most straightforward stimulus event. Seeing, touching, hearing, and smelling an object can be a strong emotional stimulus” (Desmet 2008, p. 391). Furthermore, the aesthetic experience is also related to the experience of meaning. For instance, meaning can be caused by stimuli from tangible (attribute accessible through the senses) and/or intangible attributes of products (attributes that exist only in the mind of the individual) (Hirschman 1980). Consequently, in the aesthetic experience, the tangible attributes of the product related to its aesthetic characteristics cause consumer response, such as emotions and meaning.

Emotional experience

During the interaction with products, the *emotional experience* refers to affective phenomena and emotions, such as love, disgust, fascination, among others (Desmet and Hekkert 2007). Emotions are an important component of consumer response and the study of consumer behavior (Richins 1997). For instance, delight is associated with positive emotions such as joy and enjoyment, which are frequently reported by individuals in human–product interactions (Demir et al. 2009; Desmet 2012). The aesthetic value of a product is related to the emotions generated from seeing the product appearance (Creusen and Schoormans 2005). For the aesthetic experience, the object, the interaction with the object, and the self, can be considered the source of emotions (e.g., joy) experienced in the interaction with products (Desmet 2012). Based on Roseman and Smith (2001), this research assumes that emotions are elicited by current evaluations, which

means that if an individual was asked to perceive, imagine, or remember something (e.g., how the selected possession was acquired), the expressed emotions were determined by the way the individual appraised the situation in the “now” (i.e., during the interview).

Arnold (1960) classifies emotions according to their direction toward (positive) or away (negative) from a given object, and based on whether the object is appraised as beneficial or harmful. Positive emotions “hold the promise of improving individual and collective functioning, psychological well-being and physical health” (Fredrickson 2003, p. 330), are distinguished as reactions tending toward an object (Arnold 1960), and are more frequently reported in consumption emotions research (Richins 1997). For instance, Plutchik (1980) indicates that feelings of being “surprised,” “amazed,” and “astonished” are associated with the impulse actions of “to stop activity,” “to explore or search,” and “to welcome or be with” (p. 357). The emotions experienced during a product experience are then relevant in understanding the motivational drive of the emotional bond with that product. In fact, Berlyne (1971) used “drive” or “arousal” (p. 62) to address “emotion.”

It is important to note that “only if a product continues to elicit positive emotions over time, may the owner become attached to the product” (Mugge et al. 2008, p. 427). Moreover, positive emotions are experienced most often than negative emotions in human-product interactions (Demir et al. 2009; Desmet 2012) and are usually more useful when applying emotional design (Norman 2004). Based on this, when exploring the emotional dimension of product experience, the focus of this research is in positive emotions.

Experience of meaning

The *experience of meaning* reflects a cognitive process, like “interpretation, memory retrieval, and associations,” in which individuals “are able to recognize metaphors, assign personality or other expressive characteristics, and assess the personal or symbolic significance of products” (Desmet and Hekkert 2007, p. 60). For instance, clothing may communicate social and cultural background (e.g., role and status), relation to others (e.g., quality of relationships), among other types of messages (Damhorst 1990). Thus, a product that reinforces a message that the wearer wishes to convey to others, or him, or herself, is a product that the owner most probably wants to keep and continue to wear for a long time. In other words, meaning may be the reason why consumers keep a product for longer, and experience a stronger bond with that product, because of the positive experiences lived during product–human interactions (Desmet and Hekkert 2007). The resulting meaning of product experience can be categorized in various ways. As favorite possessions may imply an emotional bond, and therefore, the presence of product attachment (Mugge et al. 2008), further understanding of the different types of meanings of possessions can shed light on the determinants of product attachment.

The present study will adopt the social-psychological categorization proposed by Dittmar (1992), which presents two types of meaning of material possessions: symbolic and instrumental. First, *symbolic meaning* is an expression of the self. Possessions can become symbols of identity or the self, while their symbolic importance may partially explain people’s attachments to those material possessions (Dittmar 1992). That is why consumers tend to place meaning on their most valued products and regard them as extensions of the self or “things to which one feels attached” (Belk 1988, p. 141). Dittmar

(1992) conceptualizes the meaning of material possessions as material symbols for identity, relating to the characteristics of the self (e.g., personality), memories of the past, and relationships; as well as symbols of social ties, such as group membership (e.g., family) or social status. More importance is generally placed on the symbolic meaning of products; yet, products may also serve the second type of meaning, *instrumental meaning*, which offers the individual control over the environment, and therefore, the possibility of creation of a strong bond between the individual and the product (Dittmar 1992). That is, instrumental meaning is use-related, function-related, and indicates that the product makes an activity or experience possible so the product symbolizes that activity or experience. For instance, an individual can experience a process of charging an activity with emotional energy (Belk 1988). In fact, Mugge et al. (2010) demonstrated that product attachment is also determined by utility.

Method

In order to address the research purpose, the following research questions were developed: *What are the product experiences participants have with clothing to which they feel strong levels of attachment? How do participants describe the aesthetic, emotional, and meaningful experiences with those products?* Upon IRB approval, data collection took form of in-depth interviews with leading edge baby boomers. Out of all baby boomers, these baby boomers refer to those individuals born between 1946 and 1955 (Euromonitor 2005; Reuteman 2010). According to Colby and Ortman (2015), leading edge baby boomers (i.e., older baby boomers) represented a significant portion of over 79 million (24.62%) of the total U.S. population by 2015. Due to a “normal retirement age” in the U.S. of at least 65 years (Social Security 2020), considering only leading edge baby boomers as participants allowed for a more homogeneous sample in the present study.

Participants were recruited during 2017 through the researchers’ existing network and recruiting pamphlets left at senior centers around the researchers’ institution. Interviews lasted between one and two and a half hours total. They were based on the interview guide presented in Table 1 and were audio-recorded with participant consent and transcribed verbatim. A \$30 Amazon gift card was provided as compensation to each participant. As photographs can aid a qualitative approach by focusing on the objects themselves and helping to elaborate interview responses (Penaloza and Cayla 2006), interviewees were asked to bring to the interview at least 5–8 photographs of the clothing that they felt most attached to, including accessories and shoes. Some participants brought the actual products to the interview. After each participant signed the adult consent form and copyright agreement for use of photographs, the interviewee was initially asked, *could you please tell me about yourself?* The goal was to inquire about demographic data, such as their age, profession, retirement status, ethnicity, and current family status. The interview then explored participants’ experiences with the selected products. After introductory questions, the participant was invited to talk about the emotional bond with each of the items selected, with questions such as: *How would you describe the bond you have with this item? How attached do you feel with this item?* The rest of the interview guided an exploration about the participants’ aesthetic, emotional, and meaningful experiences with each of the items, with questions such as: *What are the*

Table 1 Structure of the interview guide

Section	Examples of questions
1. Introductory questions: Exploration about the life of the participant	Would you please tell me about yourself? In which year were you born? Are you married? Do you have kids?
2. Product attachment: Invitation to talk about the emotional bond with each of the items selected	Why did you select this product? How long have you had it for? How would you describe the bond you have with this item? Why do you feel a bond? Do you feel that this clothing is very dear to you? Why? Do you feel attached to this clothing? From 1 to 7, being 7 the highest, how much are you attached to that item? Why?
3. Aesthetic experience: Exploration about the participant's aesthetic delight with each of the items	Could you please describe the clothing? What are the aesthetic characteristics of the clothing that you like (e.g., color, color combination, form, texture, material, smell, sound, touch, etc.)? Why do you like those qualities? Do you think the aesthetic properties of the clothing influence your attachment to it? Why? How?
4. Emotional experience: Inquiry about the participant's emotions for each of the items	What do you feel when you look at the product? What do you feel when you use the product? Do you feel pleasure when looking and/or using the product? Why?
5. Experience of meaning: Inquiry about the participant's associations with each of the items	Do you feel this product has a special meaning to you? Why would you say there is a bond with that product? Is there a story related to this product? Is there anything you want to communicate when you use that product? Are you involved in any group activities when using this clothing? What is the function that this product plays in your life? Is there an activity related to this product?
6. Closing questions	Is there anything else we did not discuss that you feel is important about these products?

This table presents a summary of the main questions asked during the interview

aesthetic characteristics of the clothing that you like? How do you feel when you look, wear or think about the product? Do you feel this clothing has a special meaning to you?

The purposive sample was comprised of 18 American participants, with an average age of 67 years and a majority of females ($n = 11$, 61.11%). As seen in Table 2, most participants were already retired ($n = 11$, 61.11%), married or remarried ($n = 16$, 88.89%), and Caucasian ($n = 16$, 88.89%). Around the 12th interview, the collected data were considered to reach saturation level, which is one of the main aims of qualitative research (Hodges 2011). The analysis included operations of categorization and the interpretation was achieved by seeking patterns in meanings (Spiggle 1994). First, a data summary table in Microsoft Excel was created for the systematic analysis. Participants were listed down in the vertical axis of the table with the different aspects of each category being recorded along the horizontal axis. After careful review, data were classified in accordance to each of the attached clothing per participant. For each possession, the main categories in the horizontal axis were the three dimensions of product experience.

For the aesthetic dimension in the analysis, the picture of the object was included with a general description of the tangible properties by using design elements, such as line, color, form, and texture. Such information, as well as the description of the aesthetic

Table 2 Characteristics of participants

Interviewee	Gender	Birth year	Profession	Retired	Ethnicity	Status	Children
Participant 1	Female	1949	High school teacher	Yes	Caucasian	Married	2
Participant 2	Female	1950	Software Professional	Yes	Caucasian	Engaged	0
Participant 3	Male	1947	Engineer	Yes	Caucasian	Engaged	3
Participant 4	Female	1947	Psychotherapist, potter	Yes	Caucasian	Married	2
Participant 5	Female	1949	Professional educator	Yes	African American	Married	1
Participant 6	Female	1946	Education	Yes	Caucasian	Married	3
Participant 7	Male	1947	Professor at university	Yes	Caucasian	Married	1
Participant 8	Female	1951	Administrative role at university	Yes	Caucasian	Married	0
Participant 9	Female	1954	Nutritionist	No	Caucasian	Married	3
Participant 10	Female	1947	Nurse	No	Caucasian	Single (Separated)	4
Participant 11	Male	1948	Entrepreneur—finance and investments	No	Caucasian	Married	3
Participant 12	Female	1952	Social worker	No	Caucasian	Married	2
Participant 13	Male	1947	Attorney at law	No	Caucasian	Married	3
Participant 14	Female	1949	Social worker, teacher	Yes	African American	Single	0
Participant 15	Male	1949	Professor at university	No	Caucasian	Married	0
Participant 16	Male	1952	Banker	Yes	Latin	Married	2
Participant 17	Male	1949	Social worker	No	Caucasian	Single (divorced)	1
Participant 18	Male	1949	Professor at university	Yes	Asian	Married	2

characteristics of the products provided during the interview by the participant, guided researchers in the exploration of the aesthetic experience. As for the analysis of the emotional dimension of the experiences, the list of 25 positive emotions in human–product interaction proposed by Desmet (2012) was adopted. This typology is clustered into positive emotions related to enjoyment (e.g., joy), gratification (e.g., satisfaction), empathy (e.g., sympathy), affection (e.g., love), interest (e.g., fascination), aspiration (e.g., desire), optimism (e.g., hope), assurance (e.g., pride), and animation (e.g., surprise). This highly cited list has been applied in various types of research (e.g., Tsai 2014). In the present study, the participants' descriptions as well as non-verbal cues were analyzed to determine the corresponding expressed emotions for each attached product in accordance with the list of 25 positive emotions. For instance, when a participant was asked how he felt about a product, the participant answered, “it makes me happy... (I feel) a nice, warm feeling,” along with facial expressions like a big smile. The emotions of “joy” and “satisfaction” selected from the list were then the most appropriate to be assigned to that product for the analysis. In the dimension of meaning, subcategories were created to classify various types of symbolic

and instrumental meaning in accordance to Dittmar (1992). Specifically, for the dimension of meaning, axial coding was applied for relating categories with subcategories (Corbin and Strauss 1998). Both researchers needed to agree with the analysis and some points of disagreements were further discussed until consensus was achieved.

Results and discussion

The level of clothing attachment experienced by participants

Interview data and interpretations provided a further understanding of the concept of attachment. Participants shared stories about why they hold on to certain possessions. In many cases, the bond was so strong that the relationship between the participant and the possession will continue for many more years. Whereas some participants selected clothing that they have had for just a few years, others selected possessions that they have kept for more than 50 years. Participants described that the selected clothing is not replaceable when: (a) they are not able to purchase the same product or a similar product again; (b) the product may be found again for purchase, but it may require much energy and effort, as it was originally very hard to find; and (c) the possession value is so high due to the strength of the experience with that specific product that other product would never replace it, even if the same or similar product is available on the market.

When participants described their attachment with selected products, lower levels of attachment were usually explained by the idea that products could be replaced. By contrast, the idea of irreplaceability usually fueled the strength of the emotional bond of the participant with the product. Furthermore, when the attachment was the strongest, participants would experience an anticipation of negative emotions triggered by the idea of losing the object of attachment. That was the case of Participant 10 (72-year-old female), who explained what would happen if the items were to be lost. She said, "I would mourn the loss of all of those things." She spoke about the selected objects as if they were family members and their loss was equivalent to the death of a relative. Findings support Richins (1994a, b)' assertion that the product attachment is stronger when the value assigned to their possessions involves considerations of irreplaceability.

For another participant, the strength of the attachment grew with the thought that the manufacturer would discontinue the product. Participant 7 (72-year-old male) indicated that it has never been easy for him to find hats that are appropriate for his head. Thus, he assigns a higher attachment to the hats that required a higher involvement during the purchase process (cf., Laurent and Kapferer 1985) because of the belief that the product may be difficult or impossible to replace. In addition to a potential relation between the concept of irreplaceability and product attachment, interpretations also suggest a relation between consumer involvement and product attachment. Findings indicate that the more resources invested by participants in the acquisition of the product, in terms of effort, money, and time; the higher the attachment experienced with those items.

Product experience of attached clothing

The data interpretation revealed participants' product experience with the attached clothing in accordance with each of the three dimensions of the framework of product experience: aesthetic, emotional, and meaning.

Aesthetic experience of attached clothing

Aesthetic experience is associated with the perception of beauty with products through all senses (Desmet and Hekkert 2007). Most participants enjoyed interacting with the selected clothing mainly through their visual sense. When a participant was asked, “why is that prom dress so important?” (see Fig. 1), she responded, “I always wanted to get that (the dress) in a long frame. It’s a museum piece to me!” (Participant 14, 70-year-old female). For this participant, the dress was aesthetically pleasurable and beautiful to look at because of its brocade fabric made with gold threads and perfect fit to her body shape. She has kept the dress for 50 years and still cherishes it as a valuable collectable piece. This confirms that we can keep and love products because they are beautiful and not necessarily functional (Norman 2004). Moreover, Participant 12 (67-year-old female) indicated a necklace as her most attached possession because its aesthetic characteristics, such as being handmade, novel, and colorful, provide character to the product and enhance her attachment to it. She explains,

This necklace was handmade and I bought it in the mountains. It was made by an artist, maybe near Asheville. I bought it to wear at our son’s wedding. I loved the fact that it is handmade and it’s different. Then, the fact that I wore it for our son’s wedding... It has the colors that I really love in it.

Not only visual properties of the product were admired; participants indicated tactile and olfactory properties of the products as catalyzers of attachment. For instance, Participant 2 (69-year-old female) indicated that she kept a white leather jacket for a long time due to its nice texture. When she tried to give the jacket away, touching it made her regret her decision. Participant 10 (72-year-old female) also talked about olfactory delight with a coat that she bought during a trip to Guatemala. She explained what happened when she wore that specific coat, “I pick that, and put it on, and I can smell the coffee and I can feel the buses. I went in a rainy season (to



Fig. 1 Prom dress used over 50 years ago still generates visual delight to the participant 14

Guatemala) and I can feel the rain. I love that place.” She further states that she wishes to keep her memories until she dies via her coat by stating,

If I lose my coat, I will lose a lot of memories. Some people say, ‘oh, if my house is burned down, I would lose all my books, I’d lose all my furniture.’ Instead, I would say ‘I lost my coat’ ... I will wear that coat until my dying day.

The data interpretations support Mugge et al. (2008) in that most participants thought that aesthetic properties encouraged their attachment to the clothing. Along with pleasing texture and olfactory sensations, participants in general indicated preference for the following aesthetic properties: color, aged well materials, novelty, fabrics, and fine details of clothing. These were influential factors for developing and sustaining attachment. As one participant says about the attachment experienced with a clothing possession she selected, “It grew on me,” thereby implying that her attachment and appreciation of the object’s beauty grew stronger over time. In fact, the creation of attachment takes time (Mugge et al. 2008). Likewise, participants talked about how repeated usage and care of the clothing over time supported the development and/or deepening of the attachment. This finding corresponds with Chapman’s (2005) argument that users cannot create/sustain attachment to products without character or aesthetic appeal.

Emotional experience of attached clothing

The participants’ attached clothing often acted as stimuli that triggered positive emotions. The most commonly experienced emotions were joy, love, enchantment, fascination, satisfaction, inspiration, relaxation, and pride. These were usually expressed along with non-verbal cues, such as smiles, surprise gestures, strong laughs, voice tone of excitement or nostalgia, and/or even teary eyes. For example, when Participant 14 (70-year-old female) described a selected dress, she acknowledged feeling “like a princess” and experiencing emotions of joy, enchantment, and fascination with the aesthetics of the dress. She also verbally, and sometimes non-verbally, described feelings of pride, euphoria, satisfaction, and desire, as the dress reminded her of when she was more beautiful, skinnier, younger, and attractive. Aiming at enhancing long-term product relationships, products should make the wearer feel beautiful (Niinimäki and Koskinen 2011). Participant 14 (70-year-old female) explains,

It’s kind of cliché to say, like a princess, but that’s the way I felt, because it was a beautiful gown. It fit me well. It was something that she (her mom) and I picked out together, and she really let me choose my fabric, and the color, and all.

Participant 15 (70-year-old male) also disclosed how he has kept a specific shirt for 44 years. As the shirt is associated with memories of the day he met his deeply loved wife, it engenders strong emotions of love, joy, admiration, enchantment, euphoria, satisfaction, hope, pride, and fascination. He explained that he and his wife have moved a lot during their marriage and that the shirt is the first thing he packs every time they move. Participant 7 (72-year-old male) also explained that one vest (see Fig. 2) was so useful to her because of the pockets, that she named the vest “happy garment.” She even stated, “I know I am going to be happy when I wear it.” In this way, this woman is not only attached to the product because it is useful, but also because



Fig. 2 Vest of participant 7 named “happy garment”

it triggers positive emotions (e.g., joy) when wearing the object. In accordance with Desmet and Hekkert (2007), findings indicate that multiple positive emotions are evoked in participants by the perception or remembrance of attached products, as well as being influential in the usage behavior of those products.

Experience of meaning with attached clothing

The data suggest four meanings assigned by participants to their most attached clothing: (a) Identity: products as a “Part of Me” that reflect who I am, (b) Memories: products as a capsule of time, (c) Social standing: products representing social status, and (d) Association with utility: products as useful “Friends.” Whereas the initial three classifications relate to symbolic meaning, the last one is instrumental (Dittmar 1992). In general, most female participants generally assigned symbolic meaning to their most favourite clothing. In contrast, male participants were more prone to charge possessions with instrumental meaning.

Identity: products as “Part of Me” that reflect who I am. In certain cases, participants’ attachment to clothing has become so strong that the possessions can be considered self-extensions that define their identities (Belk 1988). Some of those products are even valued as sacred by participants. For instance, Participant 5 (70-year-old female) is now retired and has kept clothing from her previous professional life. The way she described a shirt and skirt that were used during her working life indicate that those items were perceived as part of herself because they represented her old working self in a time when she felt a lot of pride and recognition. She also said about those items, “[they] made me look like a lady... I am a very traditional lady.” Besides representing her old self, the objects allowed her to be a “lady,” which for her was important because dressing like a lady is the appropriate way to dress in accordance with the person that she loves the most, her deceased mother. For another participant (Participant 10, 72-year-old female), the clothes she selected mainly indicated her origins. All her pieces clearly reflected that she was born in the 60’s and near the ocean. Those two aspects of her life marked, profoundly, who she is now. She declared,

(Wearing those items) it's a political statement of who I am. I have my own beliefs about what is right for me and society is not going tell me that I need to wear fancy jewelry and decorate a clothing to be recognized and to show that I have a brain because I know I have a brain.

This Participant 10 (72-year-old female) was very proud of living a simple life and dressing accordingly. About one of the items that she has kept for more than 40 years, she said, “the dress lets me be me.” During her descriptions of the selected items, she constantly expressed her desire to be in her own skin, to experience freedom, to be who she is, and only that. Consequently, she has kept clothes that have made her feel that way about herself for decades. Thus, she values products that support her identity.

Memories: products as capsules of time. Some clothing allows participants to connect with relevant memories of places, events, and people, specifically family members. For others, items would remind them of the transitions they have experienced, such as remarriage or retirement. For example, Participant 14 (70-year-old female) described how the selected products were like “time machines” that take her back in time. This was important for her, as she has lived in many different cities. Thus, she stated that items of clothing are “like little capsules of time that bring you back to those special moments.” She further clarified that she always kept tangible things, specifically apparel, that she could wear or hold on to. Her goal was to keep something that would bring back the memories of those places that she wanted to remember. She said that by doing this, the products bring her “comfort” and “security.” In this way, clothing allows her to access her best memories by looking, touching, or even wearing those possessions. As per the definition of clothing attachment, the role of memories is to act as the emotional bond between the participant and the product.

Social standing: products representing social status. Participants experienced attachment with products that were associated with a sense of status related to how others perceived them. For instance, Participant 16 (67-year-old male) explained how his Rolex watches were pieces of great technology and machinery to be admired. He found delight in looking at them as well as wearing them. When asked about how he felt when wearing those watches, he replied, “I always feel bigger... you feel more confident of your capacities, you feel more confident of yourself.” Similarly, for Participant 15 (70-year-old male), one of his most precious possessions was a doctoral regalia of Harvard University (see Fig. 3). He explained that it was not only the pride and honor that his graduation ceremony represented but also what the institution in itself means for him, as well as the wonderful opportunities that opened up after graduating with the gown. In both cases, the Rolex and the regalia of Harvard symbolize status and feelings of pride and confidence for their owners because fashion can communicate status (Damhorst 1990).

Association with utility: products as useful “Friends.” Some of the products that generated the highest levels of attachment in participants were those that were useful in activities, such as hobbies (e.g., gardening for Participant 12, 67-year-old female) and day-to-day activities (e.g., staying at home for Participant 7, 72-year-old male). Many of those items were usually comfortable to wear. Participants experiencing this type of attachment were mainly men that gave emphasis to useful products, which became indispensable after being successfully useful for a while. However, most items were replaceable if they could be bought again. Then, if the item was broken or old, some



Fig. 3 This academic regalia of Harvard University provides pride and social status to the participant 15

other item that looks, or does the same function, could easily replace it. However, when the participant believed that the item was not available for purchase any more, only then, the item was not only indispensable, but also irreplaceable. The latter represents the situations when the attachment was the highest in comparison to products that could easily be repurchased. Some participants, anticipating that the product may not be available for purchase in the future, would decide to buy several of the same product so it would be easily replaced when needed. For instance, Participant 7 (72-year-old male) experienced this type of utilitarian meaning because items made his life easier. Thus, he felt thankful with those items when saying, “they are friends,” and spoke about them as if they were alive. For him, certain characteristics of the items (e.g., lots of pockets) were helpful in his daily activities, such as walking in a more comfortable way and making the practice of his hobbies (e.g., gardening) easier and more enjoyable. It is to note that only few women described this type of situations. Nevertheless, when women expressed utilitarian meaning, they usually associated other types of symbolic meanings with the product as well. Despite Mugge et al.’s (2008) argument that product attachment goes beyond the utilitarian meaning to the owner, findings support that product attachment can also be influenced by the instrumental meaning (Dittmar 1992).

Relationships between the dimensions of product experience

In the original model of product experience, Desmet and Hekkert (2007) reflect that “an experienced meaning may give rise to emotional responses and aesthetic experiences, and vice versa” (p. 61). Nevertheless, the arrows in the model between the dimensions of product experience suggest that the emotional experience mainly emerges from the aesthetic and meaningful experiences. In contrast, summary findings presented in Fig. 4 propose that when attachment is present in the product experience with clothing, the arrows’ direction change among dimensions so that the aesthetic and emotional experiences mainly emerge from the meaningful experience.

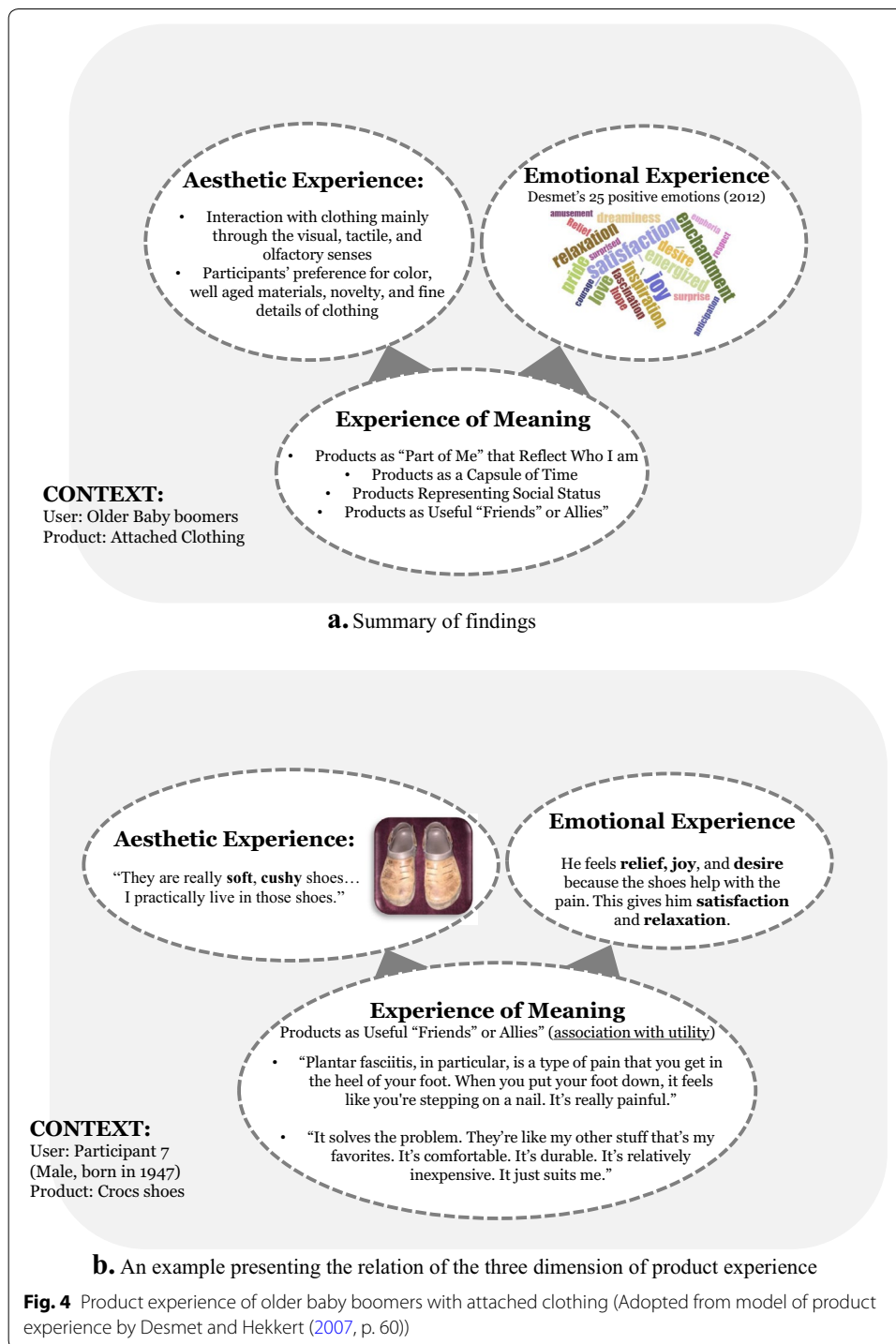
In the example presented in Fig. 4b, the usage of certain shoes that solve a problem, a foot condition called plantar fasciitis, enhances the attachment of Participant 7 (72-year-old male) with that product. This baby boomer wears those shoes all the time because they are comfortable and ease the pain that he has been experiencing for years in his foot. Besides, finding those shoes also took a while and required a high purchase involvement.

In the example, during the initial phases of interaction of the Participant 7 with the product (i.e., clogs), the aesthetic reactions (e.g., perceiving the softness of the product) produced positive emotions (e.g., relief, joy, desire) in the participant, and, eventually, meaning (e.g., this shoes solve a problem and they are my best “allies”) was created and slowly reinforced. This is how Desmet and Hekkert (2007) explained the user experience. However, after the consumer develops an attachment with the product, the positive emotions and aesthetic reactions of the participant are mainly driven by the assigned meaning, such as utilitarian meaning. Therefore, the ordering of the affective responses in the user experience varies when attachment is present. As all the products investigated were selected by participants as engendering high levels of attachment, in which product attachment was mainly driven by meaning (Mugge 2007), the relationship proposed among dimensions in Fig. 4 was present in most of the studied cases. Accordingly, the experience of meaning was the dimension that acted as the main trigger of the product experience of baby boomers with attached clothing.

Conclusions and implications

This study explored the product experiences of older baby boomers that are associated with consumer-clothing attachment. Based on the framework of product experience, data interpretations suggest that aesthetic properties of clothing, like novelty, quality, softness, smell, among others, encouraged participants' attachment, as well as triggered positive emotions in the participants, such as joy, love, enchantment, fascination, satisfaction, inspiration, relaxation, and pride. The perceived aesthetic properties and positive emotions associated with the products were usually based on relevant meanings assigned to the clothing. That is, meaning shaped aesthetic perception and emotional reactions to attached clothing. Meaning also varied and were classified as associations with: identity or the belief that the object is a self-extension (e.g., a dress that is considered a part of the participant and not a product); memories or the connection with the past (e.g., a coat that reminds the participant of a trip to Guatemala); social standing or sense of status (e.g., a Rolex that represents the participant' social status); strong associations with an activity, like hobbies (e.g., pants used in gardening) or problem solving (e.g., the shoes are helpful for foot pain).

For all participants, the stronger the product experience in terms of meaning with a specific product, the stronger the level of attachment towards that product. Whereas female participants assigned symbolic meaning most often to their favorite clothing, males were more prone to charge products with instrumental meaning. The experiences of older baby boomers with products engendering high levels of attachment are mainly created, developed, and maintained via all three dimensions of product experience; aesthetic properties of the product, positive emotions triggered by the memory, interaction, or perception of product, and its symbolic and instrumental meanings. Yet, the main



affective responses in human-product interaction with clothing participants feel most attached to, are mainly related to experiences of meaning, which are bound to the aesthetic and emotional experiences with those products.

As for managerial implications, marketers and designers can gain insights into the situations that create stronger emotional bonds between older baby boomers and their

favorite clothing. Understanding product attachment can aid designers in extending the product life cycle by creating emotional experiences (c.f., Mugge 2007; Mugge et al. 2008; Niinimäki and Koskinen 2011) and incorporating emotional design (c.f., Norman 2004). This is particularly relevant for baby boomers as findings revealed a tendency to prefer owning products (i.e., having possessions), in contrast to younger generations who are more reluctant to product ownership (Francis and Hoefel 2018; Goldman Sachs 2018).

If the designer understands the experiences derived from clothing attachment, such as the aesthetic properties that are most loved and the type of meanings and emotions that are usually triggered during the interaction with those products; then, the designer will have valuable inputs to guide the design decisions that need to be taken for achieving a design that evokes specific positive emotions. For instance, as utilitarian meaning was more commonly present in males rather than female participants, clothing brands focused on inducing relief, relaxation, and joy in male baby boomers, may offer specialized and personalized products for hobbies and special needs (e.g., highly comfortable clothing with multiple pockets). As findings also suggest that memorable experiences during purchase may increase the chances of building these emotional bonds, this study can also be utilized as inspiration during the design of services, such as retail or online shopping experiences.

Concerning theoretical contributions, academics interested in product experiences may gain a deeper understanding of the dimension of meaning in human–product interaction by considering various types of meanings in the analysis. Interpretations further support determinants of product attachment, such as possession value in terms of irreplaceability. That is, the higher the sense of product irreplaceability, the higher the product attachment experienced by the participants. Findings also suggest other possible determinants, such as consumer involvement and product experience. In other words, the stronger the consumer involvement during purchase and/or use, the higher the participants' experience of attachment with those products. Thus, the stronger the product experience in terms of aesthetics, emotions, and/or meaning, the stronger the level of attachment experienced by participants with those specific products. These propositions may be used to generate hypotheses in a future quantitative study in order to generalize findings. Gender, consumer involvement, and irreplaceability may be used as moderating variables in the quantitative model. Consequently, findings provide valuable insights to the literature on product attachment, specifically, clothing attachment.

A limitation of the study is intrinsic to the qualitative nature of the research because findings are not generalizable. Another limitation relates to the analysis of the emotional dimension of product experience. Future studies may use tools to allow participants to indicate which emotions are experienced with each possession instead of interpreting the emotions from the descriptions provided by the participants. Despite emotions were easily selected for most cases because verbatim and non-verbal cues implicitly described the emotions felt by participants, the subjective character of emotions (Quigley et al. 2014) may be minimized by the usage of an interview instrument, such as showing the list of the 25 positive emotions of Desmet (2012) when inquiring about emotions during the interview. Future qualitative studies may also explore other generations, contexts, and/or other type of product categories. Lastly, quantitative studies may further examine

the proposed determinants of product attachment, such as consumer involvement, and explore ways to measure and quantify the product experience.

Authors' contributions

LMC and SM designed and planned the study, collected and analyzed the data, and wrote the final manuscript. All authors read and approved the final manuscript.

Funding

The University of North Carolina at Greensboro provided internal funding to one of the authors for data collection and interview transcriptions.

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Ethics approval and consent to participate

The research was approved by IRB from the researchers' university. Written informed consent was obtained from our participants for the publication of this report and any accompanying images.

Competing interests

The authors declare that they have no competing interests.

Author details

¹ Associate Professor, Department of Marketing, Universidad EAFIT, Carrera 49 # 7 sur - 50, Medellín, Antioquia, Colombia.

² Associate Professor, Department of Apparel Merchandising and Management, California State Polytechnic University, Pomona, 3801 West Temple Avenue, Pomona, CA 91768, USA.

Received: 12 March 2019 Accepted: 30 January 2020

Published online: 25 April 2020

References

- Arnold, M. B. (1960). *Emotion and personality* (Vol. I). New York: Colombia University Press.
- Belk, R. W. (1988). Possession and the extended self. *Journal of Consumer Research*, 15(2), 139–168.
- Berezna, V. (2018). *Meet fashion's next generation: Over 60s. Business of fashion*. Retrieved from <https://www.businessoffashion.com/articles/intelligence/meet-fashions-next-generation-senior-citizens>.
- Berlyne, D. E. (1971). *Aesthetics and psychobiology*. New York: Appleton-Century-Crofts.
- Best, W. (2016). *Gray is the new black: Baby boomers still outspend millennials. Visa*. Retrieved from <https://usa.visa.com/partner-with-us/visa-consulting-analytics/baby-boomers-still-outspend-millennials.html>.
- Bloch, P. H. (1995). Seeking the ideal form: Product design and consumer response. *Journal of Marketing*, 59, 16–29.
- Bloch, P. H., Brunel, F. F., & Arnold, T. J. (2003). Individual differences in the centrality of visual product aesthetics: Concept and measurement. *Journal of Consumer Research*, 29(4), 551–565. <https://doi.org/10.1086/346250>.
- Chandra, C., & Kamrani, A. K. (2003). Knowledge management for consumer-focused product design. *Journal of Intelligent Manufacturing*, 14(6), 557–580.
- Chapman, J. (2005). *Emotionally durable design: Objects, experiences and empathy*. London: Earthscan.
- Colby, S., & Ortman, J. (2015). *Projections of the size and composition of the U.S. population: 2014 to 2060*. U.S. Current Population Report from Department of Commerce Economics and Statistics Administration. Retrieved from <https://census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>.
- Coleman, L. J., Hladikova, M., & Savelyeva, M. (2006). The baby boomer market. *Journal of Targeting, Measurement and Analysis for Marketing*, 14(3), 191–209.
- Corbin, J. M., & Strauss, A. C. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage Publications.
- Creusen, M. E. H., & Schoormans, J. P. L. (2005). The different roles of product appearance in consumer choice. *Journal of Product Innovation Management*, 22, 63–81.
- Damhorst, M. L. (1990). In search of a common thread: Classification of information communicated through dress. *Clothing and Textiles Research Journal*, 8(2), 1–12.
- Demir, E., Desmet, P. M. A., & Hekkert, P. (2009). Appraisal patterns of emotions in human–product interaction. *International Journal of Design*, 3(2), 41–51.
- Desmet, P. M. A. (2008). Product emotion. In H. N. J. Schifferstein & P. Hekkert (Eds.), *Product experience* (pp. 379–397). Amsterdam: Elsevier.
- Desmet, P. M. A. (2012). Faces of product pleasure: 25 positive emotions in human product interactions. *International Journal of Design*, 6, 1–29.
- Desmet, P. M. A., & Hekkert, P. (2007). Framework of product experience. *International Journal of Design*, 1(1), 57–66.
- Dittmar, H. (1992). *The social psychology of material possessions: To have is to be*. Hertfordshire: Harvester Wheatsheaf.
- Duffin, E. (2019). *Resident population in the United States in 2017, by generation (in millions)*. Retrieved from <https://www.statista.com/statistics/797321/us-population-by-generation/>.
- Euromonitor. (2005). *Forty key trends for the next decade: 20 key global trends and 20 key consumer trends 2005–2015*. Retrieved from <http://www.euromonitor.com/>.

- Feinberg, R. A., Mataro, L., & Burroughs, W. J. (1992). Clothing and social identity. *Clothing and Textiles Research Journal*, 11(1), 18–23.
- Francis, T., & Hoefel, F. (2018). 'True Gen': Generation Z and its implications for companies. Retrieved from <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/true-gen-generation-z-and-its-implications-for-companies>.
- Fredrickson, B. L. (2003). The value of positive emotions. *American Scientist*, 91, 330–335.
- Goldman Sachs. (2018). *Millennials: Coming of age*. Retrieved from <http://www.goldmansachs.com/our-thinking/pages/millennials/>.
- Hirschman, E. C. (1980). Attributes of attributes and layers of meaning. *Advances in Consumer Research*, 7(1), 7–13.
- Hodges, N. (2011). Qualitative research: A discussion of frequently articulated qualms (FAQs). *Family and Consumer Sciences Research Journal*, 40(1), 90–92.
- Issar, A., & Gupta, R. (2008). Baby boomers and beyond. *Brand Strategy*, 224.
- Kleine, S. S., & Baker, S. M. (2004). An integrative review of material possession attachment. *Academy of Marketing Science Review*, 1, 1–11.
- Laurent, G., & Kapferer, J.-N. (1985). Measuring consumer involvement profiles. *Journal of Marketing Research*, 22(1), 41–53.
- Lee, Y. A., Damhorst, M. L., Lee, M. S., Kozar, J. M., & Martin, P. (2012). Older women's clothing fit and style concerns and their attitudes toward the use of 3D body scanning. *Clothing and Textiles Research Journal*, 30(2), 102–118.
- Littrell, M. A., Ma, Y. J., & Halepete, J. (2005). Generation X, baby boomers, and swing: Marketing fair trade apparel. *Journal of Fashion Marketing and Management*, 9(4), 407–419.
- Lövgren, Karin. (2016). Comfortable and leisurely: Old women on style and dress. *Journal of Women & Aging*, 28(5), 372–385.
- Moschis, G. (1994). Consumer behavior in later life: Multidisciplinary contributions and implications for research. *Journal of the Academy of Marketing Science*, 22(3), 195–204.
- Moschis, G. P. (2012). Consumer behavior in later life: Current knowledge, issues, and new directions for research. *Psychology & Marketing*, 29(2), 57–75.
- Moussa, S., & Touzani, M. (2013). Customer-service firm attachment: What it is and what causes it? *International Journal of Quality and Service Sciences*, 5(3), 337–359.
- Mugge, R. (2007). *Product attachment* (Doctoral dissertation, TuDelft). Retrieved from <https://repository.tudelft.nl/islandora/object/uuid:0a7cef79-cb04-4344-abb1-cff24e3c3a78/>.
- Mugge, R., Schifferstein, H. N., & Schoormans, P. (2010). Product attachment and satisfaction: Understanding consumers' post purchase behavior. *Journal of Consumer Marketing*, 27(3), 271–282.
- Mugge, R., Schoormans, J. P. L., & Schifferstein, H. N. J. (2008). Product attachment: Design strategies to stimulate the emotional bonding to products. In H. Schifferstein & P. Hekkert (Eds.), *Product experience* (pp. 425–439). San Diego: Elsevier.
- Niinimäki, K., & Armstrong, C. (2013). From pleasure in use to preservation of meaningful memories: A closer look at the sustainability of clothing via longevity and attachment. *International Journal of Fashion Design, Technology and Education*, 6(3), 190–199.
- Niinimäki, K., & Koskinen, I. (2011). I love this dress, it makes me feel beautiful! Empathic knowledge in sustainable design. *The Design Journal*, 14(2), 165–186.
- Noble, S. M., Haytko, D. L., & Phillips, J. (2009). What drives college-age Generation Y consumers? *Journal of business research*, 62(6), 617–628.
- Norman, D. A. (2004). *Emotional design: Why we love (or hate) everyday things*. New York: Basic Civitas Books.
- Park, C. W., MacInnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing*, 74(6), 1–17.
- Penaloza, L., & Cayla, J. (2006). Writing pictures/taking fieldnotes: Towards a more visual and material ethnographic consumer research. In R. Belk (Ed.), *Handbook of qualitative research in marketing* (pp. 279–290). Cheltenham: Edward Elgar.
- Peters, C., Shelton, J. A., & Thomas, J. B. (2011). Self-concept and the fashion behavior of women over 50. *Journal of Fashion Marketing and Management*, 15(3), 291–305.
- Plutchik, R. (1980). *Emotion, a psychoevolutionary synthesis*. New York: Harper & Row.
- Pol, G.D. (2013). *The motivational power of beauty: How aesthetically appealing products drive purchase effort in consumers* (Doctoral dissertation, University of Southern California). ProQuest Dissertations & Theses Global database.
- Quigley, K. S., Lindquist, K. A., & Barrett, L. F. (2014). Inducing and measuring emotion and affect. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (2nd ed., pp. 220–252). New York: Cambridge University Press.
- Reuteman, R. (2010). *Older versus younger boomers*. CNBC. Retrieved from <https://www.cnbc.com/id/35372932>.
- Richins, M. (1994a). Valuing things: The public and private meanings of possessions. *Journal of Consumer Research*, 21(December), 504–521.
- Richins, M. (1994b). Social possessions and the expression of material values. *Journal of Consumer Research*, 21(December), 522–533.
- Richins, M. L. (1997). Measuring emotions in the consumption experience. *Journal of Consumer Research*, 24(2), 127–146.
- Roseman, I. J., & Smith, C. A. (2001). Appraisal theory: Overview, assumptions, varieties, controversies. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, methods, research* (pp. 3–19). Oxford, UK: Oxford University Press.
- Roser, M., Ortiz-Ospina, E., & Ritchie, H. (2019). *Life expectancy*. Retrieved from <https://ourworldindata.org/life-expectancy>.
- Schifferstein, H. N. J., Mugge, R., & Hekkert, P. (2004). Designing consumer/product attachment. In D. McDonagh, P. Hekkert, J. Van Erp, & D. Gyi (Eds.), *Design and emotion: The experience of everyday things* (pp. 317–321). London: Taylor & Francis.
- Schifferstein, H. N. J., & Zwartkruis-Pelgrim, E. P. H. (2008). Consumer–product attachment: Measurement and design implications. *International Journal of Design*, 2(3), 1–14.

- Social Security (2020). Full Retirement Age. Retrieved from: <https://www.ssa.gov/planners/retire/retirechart.html>
- Spiggle, S. (1994). Analysis and interpretation of qualitative data in consumer research. *Journal of Consumer Research*, 21(3), 491–503.
- Solomon, M. R. (1985). *Psychology of fashion*. Lexington: Lexington Books.
- Tsai, S. (2014). Meaning threats heighten consumer attachment: Implications for global brand management. *European Management Journal*, 32(6), 991–1000.
- U.S. Census Bureau. (2017). *Population projections*. Retrieved from <https://www.census.gov/programs-surveys/popproj/data/datasets.html>.
- U.S. Census Bureau. (2018). *Older people projected to outnumber children for first time in U.S. history*. Retrieved from <https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html>.
- Veryzer, J. R. W. (1993). Aesthetic response and the influence of design principles on product preferences. *Advances in Consumer Research*, 20, 224–228.
- Wolf, R., Langley, G., & Finke, R. (2014). *Baby, it's over: The last boomer turns 50*. Retrieved from <https://doi.org/10.13140/2.1.2789.2009>.
- Wray, A. Z., & Hodges, N. N. (2008). Response to activewear apparel advertisements by US baby boomers: An examination of cognitive versus chronological age factors. *Journal of Fashion Marketing and Management*, 12(1), 8–23.
- Zimmerman, J. (2009). *Designing for the self: Making products that help people become the person they desire to be*. In CHI'09 Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, Boston, MA, USA, April 04–09 (pp. 395–404).

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Submit your manuscript to a SpringerOpen[®] journal and benefit from:

- Convenient online submission
- Rigorous peer review
- Open access: articles freely available online
- High visibility within the field
- Retaining the copyright to your article

Submit your next manuscript at ► [springeropen.com](https://www.springeropen.com)
