



PLATE

Product Lifetimes And The Environment

3rd PLATE Conference

September 18–20, 2019

Berlin, Germany

Nils F. Nissen

Melanie Jaeger-Erben (eds.)

Itza de Miguel, Mariana; Schoormans, Jan; Tunn, Vivian; van den Bergh, Marie: **Optimizing second hand clothing stores based on consumer preferences**. In: Nissen, Nils F.; Jaeger-Erben, Melanie (Eds.): PLATE – Product Lifetimes And The Environment : Proceedings, 3rd PLATE CONFERENCE, BERLIN, GERMANY, 18–20 September 2019. Berlin: Universitätsverlag der TU Berlin, 2021. pp. 387–390. ISBN 978-3-7983-3125-9 (online). <https://doi.org/10.14279/depositonce-9253>.

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Universitätsverlag der TU Berlin



Optimizing Second-hand Clothing Stores Based on Consumer Preferences

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Keywords: Second-hand Fashion Stores; Fast Fashion; Sustainable Behavior; Consumer Preferences; Sustainable Fashion.

Abstract: The use of second-hand clothing can reduce the sustainability impact of clothing. It is a prerequisite of second-hand clothing shops to attune to consumers' needs to significantly increase the sales of second-hand clothing shops. In this paper, the consumer preferences with respect to second-hand clothing shops are researched using a conjoint experiment. Four store characteristics were manipulated, namely the quality of clothing, clothing availability, warranty, and brand. The study shows that participants prefer second-hand clothing stores that offer branded clothes, offer a wide assortment of good quality clothing, and even provide consumers with a 6-months warranty. Such shops are comparable to the omnipresent fast-fashion shops. It is advised to build a brand for second-hand clothing shops, e.g. using a franchise strategy to increase the diffusion of these shops. However, the limited availability of large quantities of high-quality second-hand clothing might hinder such a diffusion.

Fast Fashion

The impact of product consumption is one of our deepest cultural fissures. The fashion industry has played a major role in this by creating the so-called fast-fashion concept. Fast fashion can be defined from an industry point of view as the selling of trendy, fashionable products that are universally affordable and continually changing (Cachon and Swinney, 2011). The supply of fast fashion requires flexible and cheap production and distribution processes. Indeed, omnipresent fashion retail chains, like H&M and Zara, sell low cost products, are very flexible in product design and excel in speed to market (Bhardwaj and Fairhurst, 2010). By building on the fast-fashion business model these companies have grown to become the largest apparel companies in the world (Caro and Martínez-de-Albéniz, 2015).

From a consumer's point of view, fast fashion is associated with relatively low product prices that are combined with an acceptable level of quality, a broad and deep assortment and the frequent renewal of collections (Gabrielli, Baghi and Codeluppi, 2013). Fast fashion has influenced the meaning of clothing for consumers. Buying clothes has become part of a lifestyle. The adoption of fast-fashion products by young consumers is motivated by their limited financial resources and by the

fact that trendy and socially visible fast-fashion apparel plays an important role in socializing at this stage in their life (Joung, 2014). Unfortunately, today's treasures are tomorrow's trash (Joy, Sherry, Venkatesh, Wang and Chan, 2012). Indeed, a strong negative side effect of the constant urge to buy the newest fashion items is the discarding of items that were bought just a month before. The fashion industry, more than any other industry in the world, embraces obsolescence as a primary goal (Abrahamson 2011). This is highly unsustainable (Boström and Micheletti, 2016) as most discarded clothing is still sent to landfills (Gwordz, Steensen Nielsen and Müller, 2017).

Second-hand clothing and sustainability

More sustainable consumption of products requires product longevity by the first user or through reuse (Mugge, 2017). This applies strongly to clothing. Farrant, Olsen and Wangel (2010, p. 726) showed that "the reduction of impacts resulting from collecting 100 garments for reuse range from 14% decrease of global warming for the cotton T-shirt to 45% reduction of human toxicity for polyester/cotton trousers." Clothing is often reused by being passed on to family members, donated to charity, but also by

being sold through second-hand clothing shops. We will focus on shops in this paper.

Second-hand clothing stores

Second-hand clothing shops have seen rapid growth in the past decades (Giout and Roux, 2010), but they still only make up a small fraction of the clothing market. Buyers of second-hand clothes are motivated by two different motives. Either they shop for fashionable reasons, e.g. searching for highly fashionable items (unique, rare) or they shop for low-price related reasons (Williams and Paddock, 2003; Cervellon, Carey, and Harms, 2012; Ferraro, Sands and Brace-Govan, 2016). This means that consumers shop for vintage items and/or shop for what is mostly referred to as second-hand items. In the market, shops can be found that are targeted at vintage shoppers and shops that are more focused on the price-seekers. As indicated above, the fast-fashion industry is highly unsustainable. It would be beneficial if the percentage of clothing bought by consumers in second-hand stores grows significantly for sustainability reasons. However, such a growth can only be realized if consumers' demand for second-hand clothing increases significantly.

How to optimize second-hand clothing stores?

In marketing the idea is key that market success relates strongly to the ability of companies to provide products and services that fulfil consumers' needs and wants (Kotler, & Armstrong, 2010). A relevant factor towards an increase in demand for second-hand clothing therefore will be the availability of second-hand clothing shops that attune to consumers' needs and wants as much as possible. Second-hand clothing stores also need to optimize store attributes in order to be able to compete in the market. This is especially important as the fast-fashion industry has been able to create strong consumer demand by optimizing marketing elements like branding, positioning, store placement, pricing and advertising. In this paper, we will research the following question, How should second-hand clothing shops be designed to better attune to consumers' needs and wants? In doing so, we will limit ourselves to the second-hand clothing shops (and exclude shops that mainly sell vintage clothing) as we believe that a much larger effect on sustainability can be expected by an increase in sales of highly available items.

Research method

To answer our research question, we calculate the preferences of consumers for stores that vary in four relevant store variables. As indicated above, an important reason to buy second-hand clothing are the relatively low prices of items. However, fast fashion is also characterized by relatively low prices. This means that the financial advantage of buying second-hand clothing is small. Next to price, other store attributes such as product assortment, warranty, product quality, travelling distance, etc. determine consumer preference (Chernev, 2012). Research (Paulins and Geisfeld, 2003; Visser, Janse van Noordwyk and Du Preez, 2006) has shown that consumers' store preference is mostly based on the products that are sold in store (e.g. merchandise, type of clothing). Other store attributes, like availability of parking spaces, influence preference to a (much) lower extent.

Based on these insights, we define four attributes of second-hand clothing stores in this paper, namely clothing quality, product availability, warranty, and branding. We selected these four clothing store attributes because of their relevance for consumer preference. The first two variables are directly related to merchandise on offer and type of clothing. Clothing quality is a measure of excellence of the offered clothing. Product availability indicates the amount and sort of items found in store. Warranty and Branding are variables that are included because of their value in the "normal" fashion store preference. Warranty is a guarantee promising to repair or replace a product. Branding is defined by a design and a name used in order to create an image that identifies a store and differentiates it from its competitors.

A conjoint experiment

It is widely assumed that product or store preference is related to the perceived utility of a number of relevant variables, such as brand name, price, etc. Consumers are expected to make a choice for the product or store that has the highest utility. In this study, a conjoint experiment was used to assess consumers' preferences. In conjoint analysis it is assumed that consumers build their preferences by considering several attributes with different levels (Green and Srinivasan, 1990). In this research, four attributes with two levels each were used, namely brand: high-end, low-end; quality: high, low, availability: extensive, limited,

warranty: no, 6 months. By combining these attributes (levels), 16 scenarios were defined that describe a second-hand clothing shop. 50 TU Delft students participated who were aged between 19 and 21, with 66% female and 34% male participants. 72% of the participants buy second-hand clothing. Participants ranked the scenarios to answer the following question; What shop would you prefer to buy your second-hand clothing from? A regression model was used to calculate the relative utility of the attributes and their levels. These utilities are expressed in terms of their relative importance: the higher the importance of a variable, the more it influences the choice of the consumer in a positive way. To conclude the experiment, participants completed an online questionnaire to assess their concern for sustainability, and preference for product uniqueness.

Results

The relative importance value (higher percentage equals higher importance) indicates how important every attribute is regarded. The results show (importance values: Product quality 21.3%; Brand 24.9%; Product warranty 29.7%; and Product assortment 24.0%) that all four variables have about the same importance value, with warranty being slightly more important. This means that the participants have roughly the same preference for these four variables; it is important that a second-hand clothing store is branded, offers a wide assortment of good quality clothing and even provides consumers a 6-months warranty.

Next, based on the questionnaire assessing participants' concern for sustainability, and preference for product uniqueness responses were clustered; cluster 1 consists of 33 participants, and cluster 2 consists of 15 participants. The only difference between these two clusters is that the value that participants attach to sustainability when buying second-hand clothing is slightly (but statistically significant) higher in the second cluster. We again calculated the mean importance values, but now for the two clusters separately. The analyses show that in general the results of the two clusters are similar. The only difference is that in the smaller cluster, participants value the availability of warranty somewhat less.

Conclusions

Our study indicates that consumers perceive all four variables relevant for a second-hand

clothing store; they prefer a store that offers high quality, branded items, shows extensive availability of items, and provides consumers with an extended warranty. The results are only slightly different for the two clusters of participants that could be formed on the basis of concern for sustainability, and preference for product uniqueness.

Our results indicate that consumers prefer to buy branded products in second-hand stores. However, second-hand stores usually sell products of different brands and therefore the brands are less prominent. It is advisable that second-hand stores develop their own brand, by using a brand name and being visible on social media, thereby building consumers' trust in the store and merchandise. Indeed, at the moment a well-established brand of second-hand stores seems to be lacking as most stores are small and have a name, but not in the sense of a "brand". Therefore, a brand, combined with a franchising strategy might be an avenue to growth in this market.

Overall, the research indicates that consumers want second-hand stores that offer propositions that resemble those of mainstream (fast) fashion stores. Only in this way second-hand fashion stores are probably able to compete with mainstream fashion stores on a much larger scale than they do now. (This of course is less relevant for the vintage clothing stores that sell more on basis of uniqueness of products.)

It is, however, questionable whether second-hand fashion stores can supply enough high quality and diverse products to satisfy large groups of consumers. Maybe a cooperation of second-hand stores with large (fast-) fashion companies is needed to really increase the availability of second-hand clothing. In this case, product quality might be an issue, since fast-fashion companies usually do not provide high quality, durable clothing. Next, it is interesting to research if a chain of second-hand clothing stores under the heading of a brand can be a good alternative to fast-fashion stores and under what conditions this can be the case.

Our study has some limitations, like the small number of mostly young participants. Other target groups should be taken into account in future studies. Next, different ways to assess consumer preferences like Likert-based items can be thought of, as the present method provides relative preferences only.

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