ATTITUDES OF YOUNG EUROPEAN CONSUMERS TOWARD RECYCLING CAMPAIGNS OF TEXTILE COMPANIES

Magdalena Grębosz-Krawczyk, Dagna Siuda
Faculty of Management and Production Engineering, Lodz University of Technology, Lodz, Poland, tel. +48 42 631 3681; fax. +48 42 631 2862; e-mail, magdalena.grebosz@p.lodz.pl, dagna.siuda@p.lodz.pl

1. Introduction
Environmental issues as well as issues concerning the effect of the environment on consumer behavior appeared in the 1970s and are being developed until now [1–3]. The current environmental trends in production and marketing resulted in a closed-loop situation. There is a growing demand for environmentally friendly and ecological products, and consumers are ready to pay price premiums for them [4, 5]; therefore, the marketers explore the usage of environmentally friendly brands and labels as a competitive advantage [6]. Over the years, buyers have realized that their purchasing behavior can have a direct impact on the environment [7]. As a result, some of them are considering environmental issues by checking whether producer has used recycled materials or by purchasing sustainable products [8]. However, the awareness of the importance of clothing recycling is still negligible.

Currently, textile disposal is an increasing problem in the world. Moreover, fast fashion retailing is leading consumers toward an increased rate of purchasing and the trend to keep clothing for an ever shorter time with the resulting rise in clothing disposal [9]. The solution to this situation may be the regular implementation and promotion of sustainable discarding of textile waste by fashion brands.

The aim of this article was to identify the attitudes of young consumers in Europe toward recycling campaigns of clothing companies.

2. Textile disposal
Increasing volumes of textiles are being produced, purchased, and disposed of in landfill sites. For decades, the ubiquitous practices of the apparel industry have involved rapid production, short lead time, and increasing number of fashion seasons with lower cost materials and labor [10, 11]. It is estimated that cotton fields cover 2.4% of world’s cropland [12] and cotton production requires 10% of the annual worldwide usage of all synthetic pesticides [12, 13] and nearly 25% of insecticides [14]. The toxicity persistently impacts the environment, and it leads to destroying of cultivation as well as degradation of natural resources, 132.5 l of water is consumed to dye one pound of textile [13], and a significant amount of gasoline is consumed for transport. Textiles cause specific problems in landfills as synthetic products do not decompose, while woolen garments during decomposition produce methane and contribute to global warming.

Environmental sustainability issues become significant in the apparel industry. Textile companies try to replace dangerous chemicals with environmentally friendly materials and reduce amounts of waste and resource consumption through apparel recycling [15]. Domina and Koch [16, 17] highlighted the need to reduce the volume of postconsumer waste products being sent to landfill in USA. Their findings suggested that unwanted consumer textiles and apparels should be included in the current recycling programs and that convenience is key to increase the frequency of recycling practice. Also in UK, recycling is a vital component of the waste plan but only forms one part of the “reduce, reuse, and recycle” strategy which is aimed at educating consumers in how best to minimize their household waste in the first instance [18].

Abstract:
The aim of this article was to identify the attitudes of young consumers in Europe toward recycling campaigns of clothing companies. In the article, the results of own empirical research conducted among young consumers from Poland, France, and Spain in the fourth quarter of 2017 are presented. Recycling campaigns implemented by fashion brands, consisting of exchanging old clothes for discount vouchers, are an example of environmentally friendly innovations and fit into the concept of circular economy. The research results confirmed a minor engagement of young consumers in recycling campaigns of clothing companies. However, they declared the willingness to participate in such actions. According to the authors, an effective marketing communication strategy is fundamental to engage young consumers in clothing recycling and develop sustainable forms of clothing disposal. Clothing companies that are perceived as supporting the environment have a chance to reinforce the brand image.

Keywords:
textile products, eco-friendly innovations, ecological attitudes, circular economy
The post-purchase component of the clothing consumption process involves the decision whether older clothing is reused, recycled, or simply discarded or destroyed [19]. These textile products not only are given to charities, family members, or friends but also are discarded and end their life in municipal landfills. Textile recovery reduces the need for landfill space. On the market, there are several companies that specialize in textile recycling. They collect goods from charity shops, schools, shops, and textile banks, then sort them, and process materials that are reused or recycled.

3. Consumers’ environmentally friendly attitudes

Attitude is a person’s consistently favorable or unfavorable evaluations, feelings, and tendencies toward an object or idea [20]. Attitudes derive from other internal characteristics of a consumer, for example, values and particular concerns (beliefs), also from consumer knowledge [21]. Consumer attitudes are considered primary drivers of consumer behavior [22, 23].

In psychology, the environmentally friendly attitudes are investigated in association with core personality traits or values, trying to identify the individual features which could predict the pro-environmental behaviors [24]. Research results show that personality traits are a source of individual differences in environmental concern, agreeableness, and openness being the most highly associated with pro-environmental attitudes [25, 26].

Environmentally friendly attitudes describe the psychological tendency of consumers to favor or disfavor some behaviors that are considered ecologically sustainable as well as their overall proclivity, preference, or willingness to engage in or disengage from such behaviors [27, 28]. Although some studies have noted the direct link between eco-attitudes and eco-behavior [29, 30].

Environmentally friendly attitudes can be ascribed to the value-expressive ones according to Katz’s [31] functional theory of attitudes. Holding a positive attitude toward environment protection represents certain values that individuals prioritize not only to themselves but also to others. Due to the current environmental concern, at least minimum level of environmentally cautious behavior is desired; this kind of attitude serves as a tool to represent a fit into the group of individuals who demonstrate positive behavior.

Environmentally friendly attitudes will ultimately shape an individual’s ecologically sustainable consumer behavior or individual actions of consumers who are either harmless or less harmful to the natural environment and positively contribute to natural environment preservation or regeneration.

In spite of the interest in environmental issues, the problem of the effect of environmental attitudes on the purchasing process of clothing and textiles is not popular [32]. This aspect of consumer attitudes and behaviors is a quite new area of research. With the growing interest in environmentally conscious consumption, research trends of environmentally sustainable apparel have focused particularly on consumers’ intention to buy apparel made from organically grown and recycled material [12, 33], apparel disposal behaviors [19, 34], and consumer knowledge of the environmental impact of clothing [16, 35]. Some studies assessed the effects of environmental attitudes on apparel purchasing behavior [32] and the disposal behavior of clothing [17, 34, 36]. According to these studies, methods by which consumers dispose of their clothing are donating to charity, giving away to family or friends, selling through second-hand shops or by Internet, and throwing away into rubbish bins. According to Birtwistle and Moore [36], donating to charities and giving away to family and friends are considered by consumers the most common methods of sustainable clothing disposal. Bianchi and Birtwistle [9] confirmed that the strongest driver of consumer donating behavior is attitude toward recycling. In studied countries (Australia and Chile), consumers who have a positive attitude toward recycling are more likely to dispose of their clothing by donating to charity, rather than giving away to family or friends. Moreover, in both countries, a positive recycling behavior is enhanced by consumer age and greater levels of awareness of the environment. Shim [34] found that the environmental attitude of consumers had a strong influence on disposal methods such as recycling. Daneshvary et al. [37] and Domina and Koch [17] also found that consumer knowledge of disposal options and waste recycling has an impact on recycling methods.

However, the situation is different in the case of young consumers. Morgan and Birtwistle [7] identified that “young female fashion consumers are unaware of the need for clothing recycling.” They agree that “there is a general lack of knowledge of how and where clothing is disposed of, or even how it is made, such as the environmental consequences of artificial fibres and intensive cotton production.” However, young consumers “might consider modifying their clothing consumption and disposal behaviour if they were more aware of the social and environmental consequences.”

4. Recycling campaigns

To reduce the textile industry’s harmful impact on the environment, basic assumptions of circular economy have been implemented into clothing companies’ policies. Circular economy can be described as a regenerative system aiming at reducing the resource input and waste production by the implementation of restorative and regenerative mechanisms [38]. It is a direct opposition of the linear economy in which the used products are either landfilled or incinerated and none of the resources are used again. The linear economy processes cause the deterioration of the environment by the removal of natural capital (e.g., through mining, unsustainable farming, and harvesting) as well as by reducing the value of natural capital by pollution originating from both waste and the resource acquisition process [39].

Circular economy uses several methods of minimizing waste
and resource extraction, among them are as follows [40]:

Long-lasting design – designing products in a way which ensures its prolonged life cycle

Repair – fixing defective products instead of discarding them; it has to be underlined that spare parts and qualified staff are needed to repair more complicated products – currently, many equipment’s are thrown away due to the lack of resources for renovation; therefore, there is an urgent need to recreate practices allowing the effective fixing of the faulty devices

Reuse – functional products in good condition can be utilized again by another user

Recycling – processes allowing conversion of waste materials into new objects

Other researchers propose the definition of circular economy referring to the 3R principle [41–43], which points out the most important aspects of economy model such as reduce, reuse, and recycle. These principles are applicable to both production and consumption processes. The first of them, reduce, is connected with preventive actions aimed at avoidance of waste production, either by the reduction in raw material consumption [44] or by minimizing the use of additional products, e.g., packaging [42]. The idea of reusing assumes utilizing a certain item by various users. In opposition to reducing (referring to consumption prevention and planning), it deals with the already existing goods [45] – the product in its original form is either resold (e.g., in second-hand shops) or donated to charity. The third principle, recycle, concerns processes transforming unusable old products into raw materials or new goods. Recycling was named by European Commission a key component in the modern waste reduction [46].

Fashion industry is currently developing mechanisms based on the idea of recycling combined with reusing. An example of such strategy is recycling campaigns organized by clothing companies, currently gaining popularity in USA and Europe. A recycling campaign can be generally described as a set of actions of a fashion brand aimed at collecting used clothes and forwarding them to further reuse or recycling. The basis of its functioning is encouraging consumers (by means of incentives such as discount coupons) to bring their old textiles to the collection points located at the stores. The general scheme of recycling campaign’s operation is shown in Figure 1.

The initial point of the recycling campaign is the textile collection at the brand’s store – consumers dispose of their used textiles in return for a certain reward (mostly discounts). From here, waste material is transported to sorting facilities, where it is divided into items suitable for reuse and recycling. Many of the thrown-away cloths can be worn again – such items are either sold in second-hand stores or donated to charity. Afterward, the items that have been selected to be recycled are prepared for the process. The preparation may include actions such as cleaning, decoloring, bleaching, removal of tags, buttons, and zippers, cutting into smaller parts, etc. Following the initial treatment, the textiles can enter two different paths: the path of closed-loop recycling or the open-loop recycling. Closed-loop recycling consists of processing the waste material into such state in which it may be integrated in the supply chains of fashion industry companies once again, e.g., spinning recovered fibers into yarn. This way, recycled textiles can be used in the production of new clothing items. The processes take place inside the textile industry; therefore, the loop is closed. Other path is the open-loop recycling cycle. The waste material which cannot be converted back into fabrics might still serve as input for other industries, e.g., insulation for automotive or construction industry or industrial cleaning cloths.

Figure 1. Outline of recycling campaign operation. Source: www.ico-spirit.com/en/services/, retrieved December 7, 2017

http://www.autexrj.com/
Recycling campaigns have become increasingly popular during the last years and are currently organized by many of the leading fashion brands. Probably, the most advertised is the “Bring it on” campaign by H&M [47]. In return for a bag of used textiles, the company offered discounts, e.g., 15% off for next purchase in USA or five PLN off in Poland. Other examples of brands which created their own recycling campaigns are Marks & Spencer [48] (£5 or €7 discount in return for donation containing at least one M&S-labeled item), Forever 21 [49] (15% off coupon per one bag of textiles), and KappAhl [6] (€5 per bag).

5. Research results

The empirical studies were carried out among 100 respondents – 51 students from Poland, 25 from France, and 24 from Spain in November 2017. A nonrandom selection method of the sample studied was used, where the main criterion of selection was being a student at the local university. The empirical material for the study of attitudes of young consumers was collected by the method of direct collection of information. The research tool was a survey questionnaire. The choice of this research method was justified by the specificity of the subject matter of the paper.

As far as participation in recycling campaigns is concerned, it can be seen that most of the interviewed students have never taken part in such event – only 35% of them declared that they have given their used clothes back to the store at least once. There are no significant differences between sexes as around 40% of women and 30% of men responded positively. However, an interesting fact is noticed among the scores of selected nationalities. Although the answers of the citizens of Spain and Poland show that the majority of them have never taken part in a recycling campaign, 60% of French respondents declared their involvement in actions of this kind. As a comparison, similar answer was given by only about 25% of Polish students. Such disparity might be caused by probably more intensive marketing communication of fashion brands in France promoting returning used textiles to the shops, resulting from the adoption of extended producer responsibility as the first European country [25].

The second question surveyed the willingness of participation in a recycling campaign. The answers have shown that 75% of respondents would like to take part in such event. Here, no significant differences between nations could be observed – all presented an inclination toward these environmentally friendly actions. What might be surprising is 80% of Polish interviewees have declared their willingness (while only around 25% of them have really participated in recycling campaigns), while in the group of French citizens the readiness to take part in such campaign has been stated by 60%, which is equivalent to the percentage of French students which have in fact been involved in them. It can be seen that interviewed young consumers are eager to partake in recycling campaigns; therefore, the fact that only minority have declared their contribution to these actions might come from the lack of sufficient information.

The last question has been an attempt to establish an impact of recycling campaign on the fashion brands’ image. On the basis of the results, it can be stated that the actions connected with recycling are positively influencing the brands’ perception by the customers. Seventy-five percentage of the students questioned declared that recycling campaigns improve the brand’s image in their perception. In this case, the difference between sexes is almost nonexistent. Similarly, no disproportion between nationalities can be observed. Therefore, it might be stated that organizing the marketing communication campaign is beneficial for brands in terms of building a positive brand image among the surveyed group.

6. Conclusions
The increase in fast fashion retailing has led to large amounts of clothing being disposed of or destroyed – sent to landfills or incinerated. To safeguard the environment, consumers can make responsible decisions at the time of clothing disposal [9]. The advantages of textile reuse and recycling include both environmental and economic benefits.

The results of the research conducted for the purpose of this article confirmed a minor engagement of young consumers in recycling campaigns organized by clothing companies. However, surveyed young buyers have declared the willingness to participate in such actions. These results might indicate that clothing recycling possibilities are not sufficiently publicized. According to Morgan and Birtwistle [50], “if the environmental impact of clothing manufacturing and disposal was more widely publicized, participants indicated that clothing retailers would soon have to adapt their collections and sales strategies”. Educating the society about various recycling options would surely help in encouraging recycling behaviors among young consumers.

According to authors, an effective marketing communication strategy is fundamental to engage young consumers in clothing recycling and develop sustainable forms of clothing disposal. Mass media and environmentally friendly organizations can help in increasing the consumers’ awareness of the importance of recycling textiles. Clothing companies that are perceived as supporting the environment have a chance to increase the consumers’ loyalty and reinforce the brand image.

References

[1] Anderson, W. T., Cunningham, W. (1972). The socially conscious consumer. Journal of Marketing, 36, 23-31.
[2] Jones, P., Hillier, D., Comfort, D., Eastwood, I. (2005). Sustainable retailing and consumerism. Management Research News, 28, 34-44.
[3] Kalafatis, S. T., Pollard, M., East, R., Tsogas, M. H. (1999). Green marketing and Ajzen’s theory of planned behaviour: a cross-market examination. Journal of Consumer Marketing, 16, 441-460.
[4] Borin, N., Cerf, D. C, Krishnan, R. (2011). Consumer effects of environmental impact in product labelling. Consumer Marketing, 28(1), 76-86.
[5] McDaniel, S. W., Raylander, D. H. (1993). Strategic green marketing. Journal of Consumer Marketing, 10(3), 4-10.
[6] Tan, B. Ch. (2011). The roles of knowledge, threat, and PCE on green purchase behavior. International Journal of Business and Management, 6(12), 14-27.
[7] Montoro-Rios, F. J., Luque-Martínez, T., Fuentes-Moreno, F., Canadas-Soriano, P. (2006). Improving attitudes toward brands with environmental associations: an experimental approach. The Journal of Consumer Marketing, 23, 26-33.
[8] Laroche, M., Bergeron, J., Barbado-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. The Journal of Consumer Marketing, 18, 503-520.
[9] Bianchi, C., Birtwistle, G. (2012). Consumer clothing disposal behaviour: a comparative study. International Journal of Consumer Studies, 36(3), 335-341.
[10] Fletcher, K. (2010). Slow fashion: an invitation for systems change. Fashion Practice, 2, 259-266.
[11] Jung, S., Jin, B. (2014). A theoretical investigation of slow fashion: sustainable future of the apparel industry. International Journal of Consumer Studies, 38, 510-519.
[12] Gam, H. J., Cao, H., Farr, C., Kang, M. (2010). Quest for the eco-apparel market: a study of mothers’ willingness to purchase organic cotton clothing for their children. International Journal of Consumer Studies, 34, 648-656.
[13] Hiller Connell, K. Y., Kojar, J. M. (2012). Sustainability knowledge and behaviors of apparel and textile undergraduates. International Journal of Sustainability in Higher Education, 13, 394-407.
[14] Fletcher, K. (2014). Sustainable fashion and textiles: design journeys. (II ed.). Routledge (New York).
[15] Jung, S., Byoungho, J. (2014). A theoretical investigation of slow fashion: sustainable future of the apparel industry. International Journal of Consumer Studies, 38(5), 510-519.
[16] Domina, T., Koch, K. (1998). Environmental profiles of female apparel shoppers in the Midwest, USA. Journal of Consumer Studies & Home Economics, 22, 147-161.
[17] Domina, T., Koch, K. (1999). Consumer reuse and recycling of postconsumer textile waste. Journal of Fashion Marketing and Management, 3, 346-359.
[18] Waste Online. Retrieved December 27, 2017. Web site: www.wasteonline.org.uk.
[19] Ha-Brookshire, J., Hodges, N. N. (2009). Socially responsible consumer behavior? Exploring used clothing donation behavior. Clothing & Textiles Research Journal, 27, 179-196.
[20] Kotler, Ph., Armstrong, G. (2012). Principles of marketing. Pearson (Harlow).
[21] Leonard, L. N. K., Cronan, T. P. (2005). Attitude toward ethical behavior in computer use: a shifting model. Industrial Management & Data Systems, 15(9), 1150-1171.
[22] Frej, E., Salinas, E. (2007). Impact of environmental knowledge on ecological consumer behaviour: an empirical analysis. Journal of International Consumer Marketing, 19, 73-101.
[23] Shaw, D., Shiu, E. (2002). An assessment of ethical obligation and self-identify in ethical consumer decision-making: a structural equation modelling approach. International Journal of Consumer Studies, 26, 286-293.
[24] Pavalache-ilie, M., Cazan, A. M. (2016). Measuring ecological attitudes in a Romanian context. Bulletin of the Transylvania University of Brasov, 9, 85-90.
[25] Bukhari, M. A., Carrasco-Gallego, R., Ponce-Cueto, E. (2018). Developing a national programme for textiles and clothing recovery. Waste Management & Research, 36(4), 321-331.
[26] Hirsh, J. B. (2010). Personality and environmental concern. Journal of Business Research, 63, 1052-1059.
[27] Cho, Y. N., Thyroff, A., Rapert, M., Park, S. Y., Lee, H. J. (2008). To be or not to be green: exploring individualism and collectivism as antecedents of environmental behaviour. Journal of Environmental Psychology, 30, 265-278.
[28] Shaw, D., Shiu, E. (2002). An assessment of ethical obligation and self-identify in ethical consumer decision-making: a structural equation modelling approach. International Journal of Consumer Studies, 26, 286-293.
[29] Shaw, D., Shiu, E. (2002). An assessment of ethical obligation and self-identify in ethical consumer decision-making: a structural equation modelling approach. International Journal of Consumer Studies, 26, 286-293.
[29] Martinez, C. P., Castaneda, M. G., Marte R. B., Roxas, B. (2015). Effects of institutions on ecological attitudes and behaviour of consumers in a developing Asian country: the case of the Philippines. International Journal of Consumer Studies, 39(6), 575-585.

[30] Tanner, C., Kast, S. (2003). Promoting sustainable consumption: determinants of green purchases by Swiss consumers. Psychology and Marketing, 20, 883-902.

[31] Katz, D. (1960). The Functional approach to the study of attitudes. Public Opinion Quarterly, 24(2), 163-204.

[32] Butler, S. M., Francis, S. (1997). The effects of environmental attitudes on apparel purchasing behaviour. Clothing and Textiles Research Journal, 15, 76-85.

[33] Hustvedt, G., Dickson, M. (2009). Consumer likelihood of purchasing organic cotton apparel: influence of attitudes and self-identity. Journal of Fashion Marketing and Management, 13, 49-65.

[34] Shim, S. (1995). Environmentalism and consumers’ clothing disposal patterns: an exploratory study. Clothing and Textiles Research Journal, 13, 38-48.

[35] Kim, H. -S., Damhorst, M. L. (1998). Environmental concern and apparel consumption. Clothing and Textiles Research Journal, 16, 126-133.

[36] Birtwistle, G., Moore, C. M. (2006). Fashion clothing – where does it all end up? The International Journal of Retail & Distribution Management, 35, 210-216.

[37] Daneshvary, N., Daneshvary, R., Schwer, R. K. (1998). Solid-waste recycling behaviour and support for curbside textile recycling. Environment and Behaviour, 30, 144-161.

[38] Sposato, P., Preka, R., Cappellaro, F., Cutaia, L. (2017). Sharing economy and circular economy. How technology and collaborative consumption innovations boost closing the loop strategies. Environmental Engineering and Management Journal, 16, 1797-1806.

[39] Murray, A., Skene, K., Haynes, K., (2017). The circular economy: an interdisciplinary exploration of the concept and application in a global context. Journal of Business Ethics, 140(3), 369-380.

[40] Geissdoerfer, M., Savaget, P., Bocken, N., Hultink, E. J. (2017). The circular economy – a new sustainability paradigm? Journal of Cleaner Production, 143, 757-768.

[41] Peng, C. L., Scorpio, D. E., Kibert, Ch. J. (1997). Strategies for successful construction and demolition waste recycling operations. Construction Management & Economics, 15, 49-58.

[42] Samiha, B. (2013). The importance of the 3R principle of municipal solid waste management for achieving sustainable development. Mediterranean Journal of Social Sciences, 4(3), 129-135.

[43] Vasiljevic-Shikaleska, A., Gjozinska, B., Stojanovikj, M. (2017). The circular economy - a pathway to sustainable future. Journal of Sustainable Development, 17, 13-30.

[44] Syed, S. (2006). Solid and liquid waste management. Emirates Journal for Engineering Research, 11(2), 19-36.

[45] Papa, M. (2015). Sustainable global governance? Reduce, reuse, and recycle institutions. Global Environmental Politics, 15(4), 1-20.

[46] European Commission. (2014). Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

[47] H&M group/Recycle your clothes. Retrieved December 9, 2017. Web site: https://about.hm.com/en/sustainability/get-involved/recycle-your-clothes.html.

[48] What are the Terms & Conditions of the Oxfam Clothes Exchange? Retrieved December 12, 2017. Web site: http://help.marksandspencer.com/support/legal-and-ethical/oxfam-clothing-exchange.

[49] Social Responsibility/Forever 21. Retrieved December 12, 2017. Web site: https://www.forever21.com/us/shop/Info/SocialResponsibility.

[50] Morgan, L. R., Birtwistle, G. (2009). An investigation of young fashion consumers’ disposal habits. International Journal of Consumer Studies, 33(2), 190-198.

[51] Brick, G., Lewis, G. J. (2016). Unearthing the “green” personality: core traits predict environmentally friendly behavior. Environment and Behavior, 48(5), 635-658.

[52] Textile collecting □ KappAhl. Retrieved December 19, 2017. Web site: https://www.kappahl.com/en-US/about-kappahl/sustainability/product-responsibility/textile-collecting/.