

# *The Macrotheme Review*

*A multidisciplinary journal of global macro trends*

---



---

## Mothers' Views About Re-Evaluation of Unused Children's Clothing

Hatice HARMANKAYA

*Selçuk University, Art and Design Faculty, Fashion Design Program, Turkey*

---

### Abstract

*In the last years children, who have socialized as consumers, have formed an important market for the clothing sector. Enterprises, whose target groups are the child consumers, increase their product types continuously and address to more masses with the effect of globalization and media. Children, who are affected by elements such as peer groups, television, advertisement, the increase in socio-economic states of families, are effective on buying decisions of their parents with respect to their expectations and requirements. Due to children's physical developments and wishes that always show a change, the life cycle of clothes decreases and most of them become unusable. This situation lowers the value of the clothes production process, affects ecological life and causes economic losses. In the study the determination of the mothers' approaches towards the evaluation of the unused clothes of children was aimed. The data of the research, which was carried out in the context of descriptive method, were got with the survey technique. The sample of the research is composed of 300 mothers who live in Konya and are voluntary to answer the survey. The survey comprises the three main parts, in which there are questions concerning families' demographical properties, shopping habits and reutilization of clothes. The data were analyzed in SPSS statistical program and presented in the tables. According to findings, that the mothers give importance to the reuse of clothes of children, but are not conscious about how they will evaluate the clothes has come out.*

Keywords: Children's clothing, Recycle, Utilization of Clothes, Families' Views

### 1. Introduction

The fashion which affects the many sides of our lives is closely related to clothing (Atik, 2013: 837). The fashion industry encourages consumption through causing the planned obsolescence of the products via rapidly changing fashion trends and decreasing pricings. Those lower prices lead to a decrease in the quality of clothes and exploitive working conditions for those who were employed in the sector (Ritch, 2014: 18). The current system in the textile and clothing sector has focused on keeping the price of the final product low and increasing the production efficiency (Niinimäki and Hassi, 2011: 1876). The increased production of textile and clothing companies mean the use of more yarns, fabric, power, and machinery or carrying out more chemical processes such as dyeing and finishing, causing more pollution and producing more chemical wastes, polluted water and emission of poisonous gases. When compared to

fifteen years ago, more brand-names, more collections, more tendencies, and more products hit the shelves shoddily and with rather short lives. The consumers are obliged to buy those “disposable” products. The maintaining rapid production occurs with overconsumption of human labor and energy (Alpat, 2014: 44, 45).

The logic of consumption culture is based on the principles of creating new needs and necessity for unlimited needs. Keeping the buying desire alive through creating new needs serve for keeping the production and consumption cycle functioning and execute the profit cycle (Savaş, 2012: 136).

The fashion industry supports more ageing than any other industrial field of the world (Joy et al., 2012: 276). The clothing industry is based on extremely fast fashion cycles and unsustainable desires of the consumers. Accordingly, the textile wastes with lower quality and short term usage life cause environmental load (Niinimäki and Hassi, 2011: 1878). In the environmental axis, the fashion consumes intensive chemical paints, fields and water (for example for growing cotton) (Brito et al., 2008: 543, 535). When a product is introduced to the market, its effects on the environment become uncontrollable. The raw materials in the structure of the product, its economic life, the desire for consumption which it creates among the consumers, the use of energy, and its turning into a waste after it is used up are all the uncontrollable elements when a product is introduced to the markets. When the negative effects of consumption culture on the environment are considered, a social transformation towards a sustainable consumption pattern is necessary. The sustainable consumption is classified in three groups such as; (a) *less consumption*: decreasing the existing consumption level significantly (b) *environment-friendly consumption*: leading to re-cycling instead of junking, c) *traditional consumption*; buying from local shops, preferring old-fashioned and traditionally produced products (Savaş, 2012: 137).

The term sustainability was developed for the first time during the Conference of United Nations in 1972 (Shen et al., 2013: 134; Stall-Meadows and Goudeau, 2012: 2). Sustainability includes the ecological, economic, socio-politic and environment dynamics which may affect the livelihoods of human beings and welfare (Joy et al., 2012: 274). The sustainability increasingly draws the attention of consumers and encouraged by the governmental organizations or non-governmental organizations (Ritch, 2014 :17). Sustainability is not only solving the ecological problems caused by overconsumption of the sources but also it is a project which may be performed depending on social, cultural, economic and political solutions (Altuntuğ, 2009: 4; Porter and Linde, 1995: 126; Peatti, 2001: 131). Due to the negative environmental effects of the current clothing consumption, there is an increasing anxious related to sustainability in the fashion sector (Chan and Wong, 2012: 193). The studies executed on the sustainable effects of clothing shows that they have significant importance in the management of the textile wastes among the second-hand industry and consumers. “Buying second-hand clothes” and “re-cycling of the used clothing and textiles through enterprises” are two of eight suggestions for the ideal consumer (Hussey et al., 2009: 210). Sustainable fashion may be defined as fair trade principles, working conditions which don’t harm environment or workers, using biodegradable materials such as organic cotton, long-lasting usage and recyclable infrastructure (Shen et al., 2013: 135). The approach of sustainability is limited with the topics such as choosing substantially environment-friendly materials, understanding the attitudes of the consumers, the clothes made of organically grown cotton, donation and recycling. Preferring and consuming the clothes made of environmental-friendly materials creates a greater effect on the environment, increases the solid

waste and consumes the sources. This situation causes the seeking for more sustainable ways related to the consumption of clothing. As a sustainable movement, slow fashion has emerged in the clothing sector recently. The slow fashion aims to slow down the fashion cycle through slow production and slow consumption. The slow production doesn't mean increasing the production speed through exploiting the human and natural sources. The slow consumption requires long life without wasting. The slow consumption is establishing a conscious social movement through directing the mindsets of the consumers towards quality rather than the quantity of the products. Namely, people should be encouraged to buy high quality products less frequently. This movement has emerged as a response to increasing fashion wastes due to rapid fashion (Jung and Jin, 2014: 510).

The slow fashion movement started when Carlo Petrini protested the opening of a restaurant in Rome in 1986. The slow fashion in the clothing sector aims to make the consumers think about the origin and materials of the clothes they wear. It provides options related to social and environmental responsibility through interrogating what we buy, who produces the product and how does this information affect the quality of the product (Alpat, 2014: 45, 46).

The increase in the amount in the wastes of textile and clothing caused the developments related to re-using and re-cycling the wastes which is called as eco-productivity (Niinimäki and Hassi, 2011: 1878). Textile wastes are the wastes which emerge during the process of production in the textile factories or after the consumption of the consumers. In this sense, the textile wastes are classified in two groups such as pre-consumption and post-consumption wastes. Pre-consumption wastes include textile, fibers, and cotton industrial materials produced for automotive, aviation, buildings, furniture, beds, yarns, household goods, paper, clothing and other industries. Post-consumption wastes are defined as any clothes or textile materials which the consumer doesn't need any more and decides to throw away. Those materials are thrown away since they were worn out or became out of fashion (Katkar and Bairgadar, 2012; Üçgül and Elibüyük, 2014: 45).

In the European Union, approximately 5.8 tons of textile products are thrown away by the consumers every year. Among those textile products, only 1.5 tons of them (25%) are recycled by the charity organizations and industrial enterprises. The remaining 4.5 tons directly goes to waste or waste incineration plants (Üçgül and Elibüyük, 2014: 45). The environment protection agency states that 4 million tons of clothing and textile products were stored as waste in the USA every year. Approximately 29% of some elements are turned into new products. The fabrics are turned into fibers and value added products through cutting, breaking into pieces and combing (Dreier, 2011-2012: 20).

Textiles are the fastest growing sector in household waste. Consumption of textiles is 24.16 m tons, on average 35 kg per capita, and the expenditure on clothing has risen by 34%. The discounts in the prices of clothes and the increase about 60% in the sales result in a proportional increase in the amount of the wastes (Hussey et al., 2009: 210). The growing waste flow of annually 5-2 million tons between 2005 and 2010 shows that the fastest clothing and textile waste occurs in the UK. The increase in the amount of textile wastes is the result of an increase in the consumption of clothing and textiles. The rapid fashion with lower quality forms the 20% of the markets with a doubled increase between the years of 1999 and 2006 (Niinimäki and Hassi, 2011: 1878).

The associations and companies in European network which deal with reuse and recycling call for responsibility to the final producers in the sector of clothing and textile. This system which employs investments devoted to solving the technological problems of second hand clothing and textiles may be executed through a tax paid by the producers and importers. Such a tax system was applied in France for the first time on November 17, 2006 (Brito et al., 2008: 543).

The second hand textile industry is classified in five main categories. *a) Re-use*: the products which are sold through retail shops, *b) Re-use for Exporting*: the wearable products exported to be sold second hand, *c) The Class of Wipers*: the materials which may become rags, swabs etc. after a small process, *d) Recyclable Class*: the materials which is suitable for soaking the fibers up or degrading in order to be used in new final products) *e) The Waste*: the un-saleable or irreversible materials (Hussey et al., 2009: 211). When the enterprises buy the clothing wastes, for the first thing they categorize them as vintage in order to sell them with a good profit. Afterwards, the products are classified according to their fiber content such as cotton and synthetic. Thus, they may be cut into pieces in order to be used as industrial wipers and absorbing textiles. The mixed fabrics such as polyester cotton may be cut into pieces to make rags, may be used as filling material or may be produced in the form of new products such as insulation materials (Stall-Meadows and Peek, 2010: 3).

## 2. Method

In the research which aims to determine the opinion of mothers related to re-evaluation of the unused infants' wear, the descriptive method was used. The sampling of the research is formed by 300 mothers voluntarily chosen from various environments in Konya. Within the scope of the research, the sources related to the topic were reviewed and a questionnaire form was developed in order to collect data in accordance with the obtained information. The questionnaire which includes nine questions was kept short in order to avoid the participants are not bored while answering the questions and avoid digressing. Two of the questions were prepared in likert, six of them were closed questions and one of them was open question. The questions are in multiple choices form. The questions in the questionnaire consists three sections. In the first section, there are demographic characteristics (age, occupation, the number of children), the habits related to shopping clothes and the reasons for not using the clothes in the second chapter and there are questions about the opinions for using the unused clothes in the third chapter. The questions in the questionnaire were limited with the opinions related to re-evaluation of the unused infants' clothes in addition to fabrication recycling of them. In the executed study, the reliability (internal consistency) of scale which was formed in order to determine the approach of the mothers to the topic was analyzed and the Cronbach Alpha reliability co-efficient was determined as  $\alpha = 0.97$ . During the process of the research, the answers given to the questionnaire was controlled after the data is collected, incomplete or imperfect questionnaires were separated and the data was transferred to the SPSS package program in order to carry out statistical analyses in the correct questionnaires. The descriptive statistical analyses were carried out on the obtained data and the findings were given in the tables. The answers to the questions were shown in the tables as frequencies (f) and percent values (%).

### 3. Findings

In this chapter, there are findings obtained from the questionnaire forms used in order to determine the opinion of mothers related to re-evaluation of unused infants' clothes.

When the employs demographic characteristics is analyzed, it was determined that 53% of the participants were between the ages of 26-30, 18% of them were between 36-40 years old, 12.7% of them were between 31-35, 41.3% of them were housewives, 38% of them were civil servants, 9.3% of them were academicians and 48.7% of them had two children while 31.7% of them had a single child.

**Table 1. The Habits of Mothers About Shopping for Their Children**

	<b>Options</b>	<b>f</b>	<b>%</b>
<b>The Frequency of Buying Clothes for Children</b>	A Few Times a Month	42	14
	A Few Times a Year	17	5.7
	A Few Times a Week	3	1
	A Few Times a Season	46	15.3
	When There are Sales	65	<b>21.7</b>
	When it is Needed	200	<b>66.7</b>
	When There is a Product I like	12	4
<b>The Places Where Clothes are Bought for Children</b>	Shopping Malls	142	<b>47.3</b>
	Street Shops	101	<b>33.7</b>
	Markets	33	11
	Outlets	23	7.7
	Brand-Names	49	16.3
	Wherever I Find	94	<b>31.3</b>
<b>The Reasons for not Using the Clothes of Children</b>	The Length of Clothes are Sort	174	<b>58</b>
	The Sizes of the Clothes are Smaller	234	<b>78</b>
	They are Worn Out	132	<b>44</b>
	The Child Doesn't Want to Wear	27	9
	They Became Stained	25	8.3
	There are Changes in the Current Models of Clothes (Fashion)	3	1

When the Table 2 which employs the findings related to shopping habits is analyzed, 66.7% of them stated that they bought clothes when it is need, 21.7% of them said when there is discount; 47.3% of them bought from shopping malls, 33.7% of them bought from street shops, 31.3% them bought wherever they find; 78% of them stated they don't use the children's clothes because they got smaller, 58% them since they are shorter and 44% of them said they were worn out.

**Table 2. The Reasons for Needing New Clothes for Children**

Options	Always		Rarely		Never	
	f	%	f	%	f	%
When the Clothes are Worn Out	178	<b>59.3</b>	57	19	65	21.7
For Special Days (Eid, Birthdays, Trips, School)	122	<b>40.7</b>	116	<b>38.7</b>	62	20.7
When the Clothes Get Dimensionally Smaller	211	<b>70.3</b>	41	13.7	48	16
In the Transitions of Summer-Winter Seasons	146	<b>48.7</b>	88	29.3	66	22
When There is a Reasonable Price	118	<b>39.3</b>	113	37.7	69	23
Whenever I see New and Different Clothes	40	13.3	118	39.3	142	<b>47.3</b>
Whenever I see a Cloth Model Which I Like Much	52	17.3	138	<b>46</b>	110	<b>36.7</b>

When the Table 2 which employs the findings about the reasons for needing buying new clothes for children is analyzed; it was seen that mothers always bought clothes when the clothes got smaller in size (70.3%), when the clothes are worn out (59.3%), at the transition of summer-winter seasons (48.7%), for special days (40.7%) and went shopping when they found the prices reasonable (39.3%). Mothers rarely went shopping for special days (38.7%) and they rarely went shopping when there is a model of cloth she liked (46%). Participants stated that they never went shopping whenever they saw new and different clothes (47.3%) or they never bought clothes when they saw an admired cloth model (36.7%).

**Table 3. The Opinions About Re-Evaluation of the Un-used Infants' Clothes**

Options	Agree		Partially Agree		Disagree	
	f	%	f	%	f	%
The unused infants' clothes should be kept to be re-used for the other children of the family.	170	<b>56.7</b>	76	25.3	54	18
The unused infants' clothes should be renewed through making changes in the models ( <i>Such as adding ruffles to the edge of the skirts</i> ).	52	17.3	104	<b>34.7</b>	144	<b>48</b>
The unused infants' clothes should be donated to the people in need or charity organizations.	265	<b>88.3</b>	9	3	26	8.7
The unused infants' clothes shouldn't be stored. I don't need evaluating the clothes.	8	2.7	17	5.7	275	<b>91.7</b>
Their fabrics should be used for cleaning.	9	3	95	<b>31.7</b>	196	<b>65.3</b>
The unused infants' clothes should be used for different designs for making house textile products or accessories ( <i>A bag from children's trousers, rag bag bed clothes, lampshade and making wallets and purses from the buttons of the children's clothes, etc.</i> ).	72	24	104	<b>34.7</b>	124	<b>41.3</b>

When the Table 3 which employs the findings of opinions related to the re-evaluation of unused infants' clothes is analyzed; 88.3% of the mothers agreed on giving the unused infants' clothes to the people in need or charity organizations, 56.7% of them agreed on keeping the clothes to be re-used for other children, 91.7% of them didn't agree on infants' clothes not to be storing and not evaluating, 65.3% of them didn't agree on using the infants' clothes for cleaning, 48% of them didn't agree on renewing the unused infants' clothes through changing their models and 41.3% of them stated they didn't agree on using the infants' clothes for different designs. 34.7% of the participants stated that they partly agreed on renewing the unused infants' clothes through changing their models and using them for different designs, 31.7% of them partly agreed on using the fabrics for cleaning.

**Table 4. The Opinions Related to Making Changes in the Models or Creating Different Designs on the Unused Infants' Clothes**

Options	f	%
I don't feel necessary since I am not economically in need.	55	18.3
I don't do because I don't have time.	120	<b>40</b>
I think designing ability is necessary for giving clothes new characteristics.	42	14
I am not interested in this topic.	54	18
Information about sewing is necessary to change the models on clothes or use the clothes in different fields.	83	<b>27.7</b>

When the Table 4 which employs the findings related to making changes in the models of unused infants' clothes or making different designs is analyzed; 40% of the mothers stated that they didn't make changes on clothes since they didn't have time while 27.7% of them stated that information about sewing is necessary for changing the models of unused clothes or using the clothes in different fields.

#### 4. Conclusions

When the findings of opinions of mothers related to re-evaluation of the unused infants' clothes are considered, it was determined that the mothers bought clothes for their children whenever it is needed and there is a discount, they bought from shopping malls, street shops and wherever they have an opportunity, they preferred not using the infants' clothes when the sizes of clothes get smaller, their length is shortened and worn out.

When the findings related to the reasons for need of buying new clothes for children are evaluated, it was determined that the mothers frequently needed shopping when the clothes got smaller in size, when they are worn out, during the transitions of summer-winter seasons, for special days, and when the prices are fair. Joy et al., (2012: 276) state that the consumers under the effect of rapid fashion of the current periods scanned the shops once in three weeks in order to search for new models or just wandering around. However, it is remarkable that the participants stated that they didn't buy clothes when they see a different and new model or an admired model. It is known that families economize less especially about their children. Particularly, it is a reality that mothers try to keep the number of the clothes of their children in huge quantity.

When the findings related to the re-evaluation of unused clothes for children are examined, majority of the mothers think that the unused clothes of children should be donated to the people in need or kept for other children of the families to be used. Almost all the participant mothers objected to not re-evaluating the clothes. Majority of the participants objected to using

the fabrics of the clothes of children for cleaning purposes while some of them remained indecisive. Almost half of them agreed on renewing the unused clothes of children through changing their models or using the infants' clothes for different models while other half disagreed. In accordance with the obtained data, it was concluded that the participants remained indecisive about this matter.

When the opinions related to making changes in the models of the unused infants' clothes or creating different designs are evaluated, the mothers stated that some knowledge of sewing is necessary for changing the models of unused infants' clothes or using the clothes to create different designs. The fact that majority of the participants who were included the research are housewives is contradictory to the conclusion that they have no time.

When the results are evaluated, it can be said that the participants acted consciously about buying clothes and they bought branded products whenever they need. The families should immediately get away from rapid fashion products especially about children's clothes and since the rapid fashion requires more attention from the point of health. Inversely proportional to this, the children are physically grow up and thus, their clothes require renewing immediately before they are worn out. The infants' clothes which are good quality and expensive become out of use soon. Like all the other unused products, the clothes are also thrown away to the environment as wastes.

The concept of waste emerged with the existence of human beings. All kinds of materials which aren't needed any more and desired to be thrown away are called wastes. Turning those wastes into re-usable ones is called recycling. Thanks to recycling, the density of wastes is decreased, some saving is provided and the environment is (Üçgül and Elibüyük, 2014: 40).

The consumers shouldn't throw away their undesired clothes to rubbish because; almost 100% of those clothes may be recycled. The researchers have been emphasizing the significance of determining the ways to decrease the amount of textile and clothe wastes which are sent to the depots after the consumption during recent years. Training the consumers is a key for decreasing wastes. The difficulty in recycling is teaching the customers what to do with the undesired clothes or textiles. The purpose is to provide zero waste. The clothes bought by the customers are worn and then they are thrown away since they are worn out, they become damaged, smaller, they become out of fashion and they are not worn for a long time (Dreier, 2011-2012: 20). There is a general lack of information about where and how to get rid of the clothes (Morgan and Birtwistle, 2009: 196). The consumers generally know donating the quality clothes and household textiles to the charity organizations, giving away to friends or their families and making garage sales. Mainly, they are donated if they are too small, a bit worn out or become out of fashion. The consumers may give the clothes away, sell them or make them cleaning clothes. Unfortunately, the clothes are put into depots and cover approximately 5.2% of a depot (Stall-Meadows and Goudeau, 2012: 2, 3).

Re-evaluating the unused clothes in their original form is more preferable than re-producing them as different products after turning the old ones into fibers. Because each production process has negative effects on the environment. In order to decrease the greenhouse gas, substituting the fibers produced for the first time or re-using the clothes is more important than recycling or keeping them in depots.

Different designs may be created from the unused clothes and a new composition may be obtained. When the waste textile and clothes are turned into new products, it provides

contribution to economy and also provides opportunity for new employments. Under the umbrella of decreasing the solid wastes, the creativity develops among the consumers and awareness for recycling increases. In order to extend the life cycles of clothes, provide their indispensability through establishing an inter-consumer connection and establish a consuming awareness; always popular, classical, quality and design-based fashion products should be adopted. Thus, the simplicity should be given prominence instead of extremism in fashion. With the support of non-governmental organizations and governmental organizations, campaigns and programs may be organized to provide more value to the production of clothes with the capacity of activating social consciousness, workers in the clothing sector and consumption. When the environmental problems and the future of the world are considered, the first thing to do is to create the consciousness of environment in every field and at every level and develop the sensitivity related to this. The consumers should be informed better about the effects they caused in the environment when they throw away or store the undesired clothes. The municipalities should execute activities related to where and how to use the clothe wastes, consumers, especially mothers, should be informed through training.

In order to decrease the speed of cloth consumption, Stall-Meadows and Peek suggest that the clothes to be worn on special days and night should be borrowed from a friend, impulse shopping should be avoided, the classical styles which take a few seasons should be chosen, high quality clothes with long life should be bought and creativity should be provided through learning how to match existing clothing elements.

The fashion editor of the newspaper Sunday Times, Charty Durrant, states that the amount of water to grow cotton for a single pair of jeans is 800 liters and emphasizes the scarcity of water is closely related to the fashion. According to Durrant, the responsible for those is the “rapid fashion”, namely, copying new designs and spreading all over the world in a short time and people who are cast in the same mold. He states that this global consumption frenzy and greediness should be defeated by the slow fashion (Alpat, 2014: 45).

As a result of re-evaluating undesired clothes and textiles at home;

- The amount of solid waste decreases when the clothes aren't stored or thrown away,
- It supports sustainability and environmentalism,
- It contributes economic development through transforming the solid wastes into value added products,
- It establishes connections between clothes and users through developing the power to design and create,
- It provides employment for semi-qualified and un-qualified individuals.

This study aims to determine the opinions of the mothers about recycling the unused infants' clothes. In the subsequent studies, it is possible to execute applied studies related to clothing types in different fields for recycling.

## References

Alpat, F. E., (2014), “Yavaş Moda Nedir?”, *Akdeniz Sanat Dergisi*, 4(8), 44-47.

Altuntuğ N., (2009). “Sürdürülebilir Müşteri Değerinin Psikolojik ve Sosyolojik Boyutu: Bireysel ve Toplumsal Karakter”, *C.Ü. İktisadi ve İdari Bilimler Dergisi*, 10(2), 1-17.

- Atik, D., (2013). "Fashion Creation and Diffusion: The Institution of Marketing", *Journal of Marketing Management*, 29(7-8), 836-860.
- Brito, Marisa P., Carbone, V., Blanquart M. C., (2008). "Towards a Sustainable Fashion Retail Supply Chain in Europe: Organisation and Performance", *Int. J. Production Economics*, 114(2), 534-553.
- Chan, T. Y., Wong, C. W. Y., (2012). "The Consumption Side of Sustainable Fashion Supply Chain", *Journal of Fashion Marketing and Management: An International Journal*, 16(2), 193-215.
- Dreier, W., (2011-2012). "Cleaning Out The Closet", *Vanguard*, 19-22.
- Hussey, C., Sinha, P., Kelday, F., (2009). "Responsible Design: Re-Using/Recycling Of Clothing", *8th European Academy of Design Conference*, 1-3 April, The Robert Gordon University, Aberdeen, Scotland, 210-217.
- Joy, A., Sherry J., F., Jr, Venkatesh, A., Wang, J., Chan, R., (2012). "Fast Fashion, Sustainability, and the Ethical Appeal of Luxury Brands", *Fashion Theory*, 16(3), 273-296.
- Jung, S., Jin, B., (2014). "A Theoretical Investigation of Slow Fashion: Sustainable Future of the Apparel Industry", *International Journal of Consumer Studies*, 38(5), 510-519.
- Katkar, P., M., Bairgadar, S.M., (30.04.2012). "Textile Waste Recycling", <http://www.fibre2fashion.com/industryarticle/28/2726/textile-waste-recycling1.asp>.
- Morgan, L. R., Birtwistle, G. (2009). "An Investigation of Young Fashion Consumers' Disposal Habits", *International Journal of Consumer Studies*, 33(2), 180-198.
- Niinimäki K., Hassi, L., (2011). "Emerging Design Strategies in Sustainable Production and Consumption of Textiles and Clothing", *Journal of Cleaner Production*, 19, 1876-1883.
- Peattie, K., (2001), "Towards Sustainability: The Third Age of Green Marketing", *The Marketing Review*, 2, 129-146.
- Porter, M. E., Linde, C. V. D., (1995), "Green and Competitive: Ending The Stalemate", *Harvard Business Review*, September-October; 120-134.
- Ritch, E. L., (2014). "Extending Sustainability From Food to Fashion Consumption: The Lived Experience of Working Mothers", *International Journal of Management Cases*, 16(2), 17-31.
- Savas, H., (2012). "Tüketim Toplumu, Çevre Performans İndeksi ve Türkiye'nin Çevre Performansının İndekse Göre Değerlendirilmesi", *Tarih Kültür ve Sanat Araştırmaları Dergisi*, 1(4), 132-148.
- Shen, D., Richards, J., Liu, F., (2013). "Consumers' Awareness of Sustainable Fashion", *The Marketing Management Journal*, 23(2), 134-147.
- Stall-Meadows C., Goudeau C., (2012). "An Unexplored Direction in Solid Waste Reduction: Household Textiles and Clothing Recycling", *Journal of Extension*, 50(5).

Stall-Meadows, C., Peek, G., (2010). Recycled Household Textiles and Clothing, Oklahoma Cooperative Extension Service, *Division of Agricultural Sciences and Natural Resources*, Oklahoma State University, T-4318, 1-4.

Üçgöl İ., Elibüyük, U., (2014). “Tekstil Atıklarının Piroliz ile Değerlendirilmesi”, *SDU Teknik Bilimler Dergisi*, 4(2), 40-46.