

# An investigation of young fashion consumers' disposal habits

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## Abstract

The research, undertaken in two different stages, was aimed at establishing an understanding of how consumers dispose of fashion products and how to increase sustainable consumption. Increasing volumes of textiles are being produced, purchased and disposed of in landfill sites, which affect the environment. Research has identified the influences in increased purchase behaviour and the tendency to keep clothing for a shorter time. A combination of qualitative and quantitative methods was used to undertake this exploratory research. Consumer focus groups and interviews were conducted initially to identify the main themes relating to fashion consumption and disposition. These were followed by a survey administered to young females to ratify the qualitative findings and to ascertain the extent of textile reuse and recycling. This study identifies consumers' lack of understanding of how this behaviour affects the environment and suggests ways of addressing the growing problem of textile waste and how fashion consumption could become more sustainable.

## Introduction and theoretical background

The UK apparel industry has been revolutionized in the past 5 years by a new phenomenon that offers consumers the latest trends at low prices, just weeks after they appear on the catwalk. 'Fast fashion', as it has come to be known, has become increasingly popular among retailers, as more and more chain stores adopt the vertically integrated business model originally derived from the 'Just-in-time' manufacturing philosophy and Quick Response strategies (Birtwistle *et al.*, 2003), adopted by Inditex Group and pioneered by H&M, in an attempt to sate the appetite of fashion-hungry consumers wanting to buy items in new trends as they appear (Keynote, 2008; Sielge, 2008). The demand for cheap fashion is high, and the fast-fashion clothing market has grown significantly in response to this trend. Fast fashion has gained market share recently and now accounts for one-fifth of the total clothing market in the UK (Defra, 2008a). This phenomenon has led to consumers purchasing and disposing of ever-larger quantities of clothing. In the UK, more than 1 000 000 000 kg of textiles is sent to landfill every year (Waste Online, 2008).

Young consumers are more concerned with trends than probably any other age group (Martin and Bush, 2000). As such, they are also the most avid consumers of fast fashion and heavily influenced by the fashion press and media (Birtwistle and Moore, 2006a; Greene, 2008; Keynote, 2008). A study of young males and females between the ages of 15 and 24 reports that 38% shop at

Primark, 35% at Topshop/ Topman, 33% at New Look, 31% at River Island and 24% at H&M (Keynote, 2008)

While a significant body of research has explored the reuse and recycling of paper, glass and plastic (Holbrook, 1995; de Coverly *et al.*, 2003; Jackson, 2003), little empirical research has addressed textiles in this respect (Domina and Koch, 1999; Birtwistle and Moore, 2006b). Hence, the purpose of this paper was to examine the purchase behaviour and disposal habits of young consumers and suggest ways in which fashion consumption could become more sustainable.

## Fast fashion

According to Mintel (2007), the exceptional growth of fast-fashion retailers can be attributed to high impulse buying, an increase in sourcing from low-cost countries and a change in consumer attitudes, with the removal of stigma attached to buying from value retailers (Birtwistle *et al.*, 2003). Fast-fashion companies turn around new styles from design to shop floor within 2 weeks. This successful recipe has allowed retailers to generate large profits selling vast quantities of low-price clothing to shoppers seeking something new to wear every week (Keynote, 2008).

Nevertheless, there is a suggestion that some consumers are growing tired of the relentless consumerism of buying so much clothing so frequently, but the appeal of 'cheap chic' newness remains very alluring to teens and early twenties looking for something different to wear while socializing (Mintel, 2007; Keynote, 2008). Forecasts of demographical trends reveal that,

while some age groups are in decline, there is to be an expansion in the 15- to 29-year-old group over the next 5 years. These projections suggest that fast fashion will remain buoyant for the foreseeable future, thanks to its attraction to the young and fashion-hungry, as well as its practical appeal to the lower socio-economic groups (Mintel, 2007), thus highlighting the need to address the issue of textile waste.

## Fashion innovativeness and purchasing behaviour

Related to these findings, a significant body of literature has focused on a deeper investigation into the factors that might influence the consumer behaviour of specific social groups (Strong, 1996; Shaw and Clarke, 1999; Carrigan and Attalla, 2001; Brinkmann, 2004; Jackson, 2004). Goldsmith *et al.* (1999) highlight that the success of a new fashion product is related to its acceptance by fashion innovators in the early stages of the product life cycle. The adoption theory, proposed by Rogers (1983), asserts that, even within the same culture, not everyone adopts an innovation at the same rate. Rogers divided consumers into five distinct categories to help explain how an innovation spreads throughout society at different rates. The categories are:

- innovators – 2.5%;
- early adopters – 13.5%;
- early majority – 34%;
- late majority – 34%;
- laggards – 16%.

On examination of Roger's theory, two interesting facts are noted. First, approximately 16% of consumers – innovators and early adopters – are highly fashion conscious and aware of new trends. These new trends are noticed, evaluated and adopted in a short period of time. Secondly, two-thirds of shoppers belong to the early or late majority. They are interested in new trends but less inclined to adopt them very quickly; hence, everyone, save the laggards (16%), cares about fashion trends.

The marketing and apparel literatures are unanimous in reporting that fashion leaders tend in general to be young consumers (Mason and Bellenger, 1974; Gutman and Mills, 1982; Horridge and Richards, 1984; Goldsmith *et al.*, 1991). Additionally, Newman and Patel (2004) assert that, compared with other consumer groups, fashion leaders, or 'innovators', deem fashion to be of importance to their lifestyles. They have strong opinions about taste, are advocates of new trends and are sources of inspiration for other consumers when adopting and buying the latest styles (Polegato and Wall, 1980; Kaiser, 1990; Beaudoin *et al.*, 1998). Later research by Beaudoin *et al.* (2003) reveals more specifically that, in adolescents aged 12–17, there are more females in the 'innovators' and 'early adopters' categories and more males in the 'late majority' and 'laggards' categories.

## Celebrity and media influence

Recent research by Birtwistle and Moore (2006b) indicates that fashion innovators and early adopters, compared with followers, are heavily influenced by the fashion media. They shop and purchase fashion items more frequently, are influenced in their purchasing habits by celebrities and are spending more per month than they did previously. Clothes purchased for socializing are

only worn a few times; meanwhile, work garments are expected to be kept for longer. In contrast, fashion followers are more concerned with whether clothing is practical and could be worn again the following season. Nevertheless, even younger fashion followers do not expect to keep garments for a long time. These findings are supported by Greene's (2008) observations about the influence of aspirational lifestyles and 'must-have' fashions depicted in current US dramas, *The OC* and *Gossip Girl*. Indeed, fashion publicist Kristian Laliberte (cited in Greene 2008) hails the shows' stars as 'the new influencers'.

## Disposable fashion

Fast-fashion retailers, such as H&M, Zara, Primark, TopShop and New Look, sell garments at very competitive prices. Furthermore, their designs are made to be worn less than 10 times (McAfee *et al.*, 2004). It is this very premise that has led to the coining of the term 'disposable fashion'. Indeed, during an interview for the BBC, fashion journalist Hilary Alexander contended that H&M had launched disposable fashion, adding: 'I'm not entirely convinced that it is such a good thing because some of the things in H&M are so cheap that literally you'd be lucky to get two or three wears out of it and then you'd chuck it away' (cited in Keynote, 2008). In academic and media circles, this phenomenon is now often referred to as the 'Primark effect' (Shields, 2008) – a moniker that plainly attributes a degree of culpability to the retail industry, not least Primark itself.

The relationship between fast fashion and increasing textile waste is now unmistakable. A recent study by the Environment Select Committee revealed that the proportion of textile waste being discarded at council refuse collection points in the past five years has increased from 7% to 30% by weight (Poulter, 2008; Shields, 2008), thus highlighting the fact that consumers are discarding higher volumes of textile waste than before. This is clearly a result of the cheap clothing readily available from fast-fashion retailers. Because of the synthetic nature of the materials used in the cheap clothing, they are not easily recyclable. These growing concerns raise the issue of retailer accountability. Supermarket spokesman Julian Walker-Palin (cited in Poulter, 2008) suggests that Asda's fast-fashion label, George, has begun to address the issue of 'throwaway clothing' by reducing the number of clothing options by 20% in response to customer feedback that quality and value for money were taking precedence over fast fashions. The squeeze on discretionary income suggests that consumers are seeking wardrobe essentials as opposed to constant new trends in the current economic downturn (Poulter, 2008). Conversely, however, rising profits at Primark reveal that the demand for cheap fashion remains (Poulter, 2008).

## Sustainable consumption and environmental concern

During the 1970s, concern with environmental and ethical issues came to public awareness and later gained acceptance in subsequent decades (Anderson and Cunningham, 1972; Doane, 2001; Sanne, 2002). The reason for this was the greater public awareness of environmental issues and ethical concerns raised by pressure groups and the establishment of regular international conferences providing a forum for their discussion (Strong, 1996; Robins and

Roberts, 1997; Kalafatis *et al.*, 1999; Jones *et al.*, 2005). One of the specific themes to emerge from this dialogue was that of sustainable consumption – a term that entered everyday phraseology during the early 1990s (Jackson, 2004). Sustainable consumption is defined as ‘consumption that supports the ability of current and future generations to meet their material and other needs, without causing irreversible damage to the environment or loss of function in natural systems’ (OCSC, 2000, cited in Jackson, 2004).

As environmental issues have grown in importance, interest in recycling has increased in the UK (Keynote, 2007; Defra, 2008b). Moreover, waste management has become an important focus for the government, both in this country and worldwide. Policy is driven by legislation that centres around restrictions on landfill, treatment and disposal of hazardous waste, and increasing the practice of recycling (Keynote, 2007; Defra, 2008b). While consumers are now questioning the link between low fashion prices and unethical working conditions in factories overseas (Mintel, 2007), there still appears to be little awareness of the impact of the disposition of high volumes of textile waste (Domina and Koch, 1999, 2002; Birtwistle and Moore, 2007).

Devolution of government within the UK has led to the creation of regional waste strategies. Traditionally, the UK has relied on landfill as a method of waste disposal. However, the methane emitted by biodegradable waste is a potent greenhouse gas – 21 times stronger than CO<sub>2</sub> (Defra, 2008b). Furthermore, landfill space is finite and due to run out in less than 10 years' time (Milner, 2007), thus compounding the need to raise awareness of how consumers can reduce waste. As a result, legislation is calling for a significant reduction in this method. Hence, the introduction of the Landfill Tax (Keynote, 2007). Recycling is a vital component of the UK's waste plan but only forms one part of the three R's strategy – ‘Reduce, Reuse and Recycle’ – which is aimed at educating consumers in how best to minimize their household waste in the first instance (Waste Aware Scotland, 2007; Waste Online, 2008).

## Reuse and recycling of clothing

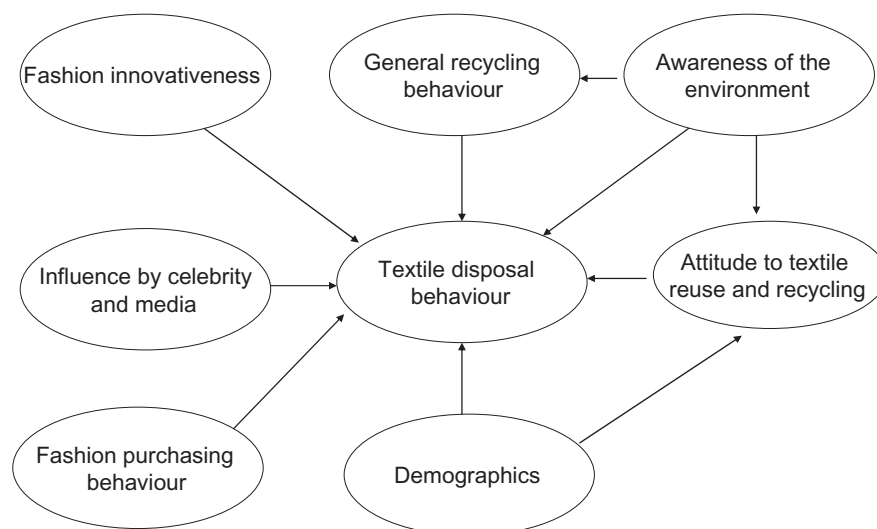
Sustainable consumption as an aspect of consumer behaviour involves pre-purchase, purchase and post-purchase components (Jacoby *et al.*, 1977). The disposal element is a relatively new area of research (Holbrook, 1995; Domina and Koch, 1997, 1999, 2002; de Coverly *et al.*, 2003). Essentially, this final component of consumer behaviour is about whether clothing is reused, recycled or simply discarded or destroyed. Jacoby *et al.* (1977) developed a basic framework and identified three main factors – psychological characteristics of decision making, intrinsic factors to the product and situational factors extrinsic to the product – to explain disposal behaviour and positioned consumers as ‘redistributors’ in the channel structure, rather than ‘end users’. Burke *et al.* (1978) profiled consumers on the basis of whether they discarded products or disposed of them responsibly. They found that consumers who disposed of products with little reference to further use, potential use by others or the environmental impact of disposition tended to be younger. This is an increasing problem in the UK, where more than 100 000 000 000 of waste from households and commerce (Defra, 2008b) and 1 000 000 000 kg of textiles is deposited in landfill sites every year (Waste Online, 2008).

US studies by Domina and Koch (1997, 1999, 2002) have highlighted the need to reduce the volume of post-consumer waste products being sent to landfill in the US. Their findings suggest that unwanted consumer textiles and apparel should be included in the current recycling programmes and that convenience is key to increasing the frequency of recycling practice.

Far from being a modern development, textile recycling as an enterprising practice, can be traced back 200 years to the Yorkshire Dales, where ‘rag and bone’ men travelled the streets collecting old rags and scraps to convert into fabric and paper or trade for other items (Waste Online, 2008). Today, because of higher ownership of private transportation, many consumers dispose of their own unwanted textiles to charity shops, such as Oxfam, Salvation Army and Cancer Research, where donations are sorted and sold in their own shops or to waste merchants. Staff at recycling units sort clothing and leather goods and send suitable items to Africa, East Europe and Asia, where they are reused; items that cannot be sold or donated are made into cleaning rags for the oil or automotive industries or sold to ‘flocking’ firms, where items are shredded for fillers in car insulation, roofing felts and furniture padding (Waste Online, 2008). Linen, cotton and viscose can be made into paper pulps, and wool can be recovered and felted or respun (TRC, 2006). Textile reclamation businesses recycle both natural and man-made fibres, and the majority of all textiles thrown away are recyclable (Waste Online, 2008).

Recognizing the importance of reducing the volume of textile waste sent to landfills, Marks & Spencer have recently created a partnership with Oxfam, whereby, for every bag of unwanted Marks & Spencer clothing donated to the charity, the consumer receives a £5 voucher redeemable against purchases at Marks & Spencer to the value of £35 or more (Marks and Spencer, 2008). This has increased not only the donations received by Oxfam but also the sales at Marks & Spencer. Oxfam has also endeavoured to raise the awareness of and increase the uptake of textile recycling by organizing clothes-swapping events during the Oxfam music festival, where young people are encouraged to bring along unwanted clothing or shoes in good condition and swap them for other items of a similar value while watching gigs at nightclubs around the country (The List, 2007).

The advantages of reuse and recycling comprise both environmental and economic benefits. Textile recovery reduces the need for landfill space. Textiles present particular problems in landfill because synthetic products do not decompose, while woollen garments decompose and produce methane, which contributes to global warming (Naturegrid, 2006; Waste Online, 2008). A number of companies specialize in textile recycling, and The Textile Recycling Association (TRA) has more than 50 members (TRA, 2008). Nathan's Wastesavers (2008), based in Scotland, is a member of TRA. The firm, established in 1903, is the largest recycling firm in the UK. It collects goods from charity shops, schools and more than 1000 textile banks and sorts and processes more than 400 000 kg of materials every week – 98% of which is reused or recycled. The UK Government has now outlined a road map for waste reduction in all areas, including textiles because clothing and textiles have a high impact on the environment because of the high volume of clothes purchased (European Commission, 2006; Defra, 2008b).



**Figure 1** Conceptual model.

## Conceptual model

Based on the literature, the following conceptual model is proposed to be tested in the primary research (Fig. 1).

## Methodology

The research contained two phases: an initial exploratory phase of 10 consumer focus groups and 6 consumer interviews, followed by a structured survey issued to young females. A combined qualitative-quantitative approach, known as triangulation, was adopted for this study. The exploratory nature of the research benefitted from an initial qualitative stage, giving depth and richness of data. The subsequent quantitative phase sought to establish whether relationships existed between the variables (Saunders *et al.*, 2003). The focus groups were conducted during December 2005 and targeted younger fashion consumers. In total, 71 females in the 17–25 age group participated. The aim of the focus groups was to establish an understanding of attitudes towards purchasing and disposal of fashion garments. This age group was targeted because young people purchase fashion garments more frequently than older people (Mintel, 2007), and, if disposal habits are to be changed, then it is this age group that must be influenced. Moreover, the sample consisted solely of females in line with previous research that revealed that they purchased clothing more frequently and were more interested in new trends, than males do (Beaudoin *et al.*, 2003). The six in-depth interviews with female fashion consumers aged between 27 and 57 were carried out in March 2006 to identify differences in attitudes and disposal methods between younger and older age groups.

In the second phase, a survey was administered in Glasgow city centre in the autumn of 2007 using street intercept interviews; 225 female adults completed the questionnaire and 206 (91.6%) were usable. The questionnaire consisted of six sections. The first one identified the three stores where respondents had made most of their fashion purchases in the last 6 months; the second section used the domain-specific innovativeness (DSI) scale by Goldsmith and Hofacker (1991); section three explored fashion purchasing

behaviour based on Birtwistle and Moore's (2006a,b) work; section four examined general disposal and recycling behaviour, with section five investigating clothing and textile disposal habits (Domina and Koch, 1999). The final section contained questions on the demographical profile of respondents.

## Data analysis and findings

The qualitative and quantitative research data are combined and presented in terms of seven themes: 'fashion innovativeness', 'influence of celebrity and media', 'fashion purchasing behaviour', 'awareness of the environment', 'general recycling behaviour', 'attitude to textile reuse' and 'recycling and textile disposal behaviour'. The statistical analyses used to examine the data were descriptive, correlation, reliability and regression. The profile of the respondents participating in the survey is presented in terms of age, status and educational profile (Table 1).

### Fashion Innovativeness

The questionnaire uses the DSI scale by Goldsmith and Hofacker (1991) using the five-point Likert response format. Summed scores on the fashion innovativeness scale ranged from 6 to 28, with a mean of 19.4 (SD = 4.07) with a reliability coefficient of  $\alpha = 0.703$ . The results show that 50.0% of the respondents obtained a total score less than 20. In line with a previous analysis (Birtwistle and Moore, 2006b, 2007), all respondents scoring 23 and above are identified as fashion innovators, and early adopters are referred to as fashion adopters (24.3%), the rest (75.7%) being fashion followers. This distribution reflects the fact that fashion innovators and early adopters represent a minority of consumers in most market segments (Goldsmith and Flynn, 1992) and that the way this survey was administered meant that a high proportion of respondents had an interest in fashion. Younger respondents are more likely to be fashion adopters than fashion followers and are also more likely to be single. There are no correlations between fashion innovativeness and education, household annual income or occupation of the main provider.

**Table 1** Profile of respondents

Age	Percentages in Age Groups	Status	Percentages of Status Groups	Education	Percentages in Educational Groups
15–24	77	Single	54	School standard level	4
25–34	10	Single living with parents	25	School higher level	29
35–44	4	Single with children	1	FE	8
45–59	8	Living with partner	11	HE degree	45
60+	1	Living with partner with children	9	HE higher degree	14

HE, higher education (universities); FE, further education (colleges).

**Table 2** Regression analyses

Dependent	Independent	R <sup>2</sup>	β	t	Sig
Fashion innovativeness	Celebrity and media	0.316	0.562	9.706	0.000
Fashion innovativeness	Fashion purchasing behaviour	0.149	0.386	5.977	0.000
Awareness of the environment	Recycling behaviour	0.051	0.225	3.294	0.001
Awareness of the environment	Donations to charities	0.038	0.194	2.792	0.006
Recycling behaviour	Donations to charities	0.165	0.406	6.280	0.000

Purchasing Behaviour	In Percentages	Monthly Spending on Fashion	In Percentages
More than once a week	9	£300–399	1
Once a week	23	£200–299	6
Every two weeks	22	£100–199	22
Once a month	34	£50–99	41
Twice a year	4	£25–49	24
For special occasions	8	<£25	6

**Table 3** Purchasing behaviour

### Influence of celebrity and media

In the focus groups, the majority of female respondents were readers of fashion or celebrity magazines. The overwhelmingly most popular magazines were *Heat* and *Hello*; others included *OK*, *Grazia*, *Cosmo*, *Elle*, *Glamour* and *Marie Claire*. Respondents used magazines to identify trends, which they then followed by purchasing lower-priced imitations from high-street stores. In the questionnaire, five questions were related to fashion and celebrity influence via the media, and a new summarized variable was created by adding five items – ‘influence of celebrity and media’. The coefficients among items differ from 0.149 to 0.471 ( $P < 0.05$ ), implying that there are strong correlations between them. In addition, the reliability coefficient of those variables is 0.736, indicating good reliability for so short a scale. Summed scores on ‘influence of celebrity and media’ scale range from 5 to 25, with a mean of 15.98 ( $SD = 3.96$ ). The result shows that 54.0% of the respondents obtained a score of 16 or less, and 18.1% have scores from 20 to 25. This group is regularly and very frequently influenced by celebrity and media. A regression analysis demonstrates that an interest in celebrities and fashion media is a predictor to ‘fashion innovativeness’ (Table 2).

### Fashion purchasing behaviour

The stores the younger consumers had purchased most from in the last 6 months were the fast-fashion retailers H&M, Primark, Top Shop, New Look and River Island, and many would shop two or three times a week. The older interviewees added Marks & Spencer and Next to this list. None purchased every time they visited because browsing was considered a leisure activity. The majority thought they bought more now than they used to do, and the amount spent varied between £15 and £200 per month. Some expressed concern with the rising trend of fast fashion and greater abundance of products available, and many felt alienated by the increasing pace of change in fashion.

In terms of purchasing fashion, about one in ten purchased more than one item weekly, and one in five purchased something every week. One in five purchased something once a fortnight; one in three made a monthly purchase, and one in ten mainly purchased something for special occasions or shopped for fashion twice a year (Table 3). These findings demonstrate that more than half the respondents purchased fashion garments at least every 2 weeks, and more than three-quarters bought something every month. The monthly spend is a subjective estimation of what each individual thought they spent, with the majority stating that they spent less



than £100 per month, and only around a third admitting to spending more than that. Hence, in terms of expenditure, it is evident that many of these items are purchased from the fast-fashion retailers such as Primark (44%), Top Shop (47%) and H&M (44%). These figures are generally consistent with the literature (Keynote, 2008). The following quote from the focus groups helps illustrate the fact that young females buy much clothing regularly to update their looks: 'If there was a top in Topshop for £40, I'd think of all the other things I could get for that price instead . . .'. It would seem that young consumers would prefer to buy several cheaper items of fashion than one more expensive piece, thus contradicting new research that suggests consumers are moving towards investment buying for quality and longevity (Mintel, 2007; Poulter, 2008).

Two questions relating to fashion purchasing behaviour are correlated (0.470; sig. 000). In addition, the reliability coefficient of those variables is 0.625, indicating good reliability for so short a scale. The regression analyses indicate that 'fashion innovativeness' is a predictor of purchasing behaviour, and this leads to the assertion that young women who are interested in fashion and purchase fashion and celebrity magazines are the consumers of fast fashion (Table 2). These findings consolidate previous research by Birtwistle and Moore (2007).

### Awareness of the environment

Because correlation coefficients between four of the questions to attitudes towards the environment are between 0.373 and 0.533, with significance level at 0.000, it is surmised that there are correlations between these items. The reliability coefficient of these variables is 0.755; hence, a new variable is created: 'awareness of the environment'. Summed scores on 'awareness of the environment' scale range from 4 to 20, with a mean of 14.797 (SD = 3.05).

### General recycling behaviour

Because correlation coefficients for the five questions vary between 0.568 and 0.721, with significance level at 0.000, it is inferred that there are strong correlations between these items. The reliability coefficient of these variables is 0.901, creating a new variable: 'recycling behaviour'. Summed scores on recycling attitude range from 5 to 25, with a mean of 15.55 (SD = 5.55). These results show that 57.8% of the respondents obtained a score of less than 16, and about a quarter of the respondents (27.2%) have scores from 20 to 25. This means that one in four of the respondents regularly recycles plastic, glass and paper and makes an effort to try to find recycle bins. However, there are no correlations between 'general recycling behaviour' and 'fashion innovativeness' or 'purchasing behaviour'. The regression analyses indicate that people who are worried about the environment and what we are doing to the environment are more likely to make the effort to recycle items such as glass, paper and plastic (Table 2). These findings suggest that raising the profile of the impact of increasing textile waste going to landfills and educating people about the various recycling options would help encourage recycling behaviour.

### Attitude to textile reuse and recycling

Four items regarding textile disposal behaviour are linked to reuse by family or friends, and, because correlation coefficients range between 0.381\*\* to 0.647\*\*, a new variable, 'reuse by family and friends', was created that has a reliability coefficient of 0.766. However, there is no correlation with 'fashion innovation', 'attitude to the environment' or 'general recycling behaviour'. This means that there are other reasons why some young females give or swap the latest fashion items, which could be because they want to wear something different each time they socialize and only want to wear each item a few times.

Another three questions indicate the attitude and disposal behaviour with social benefit because of charitable activities. Because correlation coefficients between these items range from 0.349\*\* to 0.666\*\* with a significance level at 0.000, it is inferred that there are correlations between them. The reliability coefficient of these variables is 0.728, indicating good reliability for so short a scale. Therefore, a summarized variable representing 'donations to charities' was created. The regression analysis indicates that an awareness of the environment and habits of recycling items such as glass, plastic and paper make it more likely for a person to donate surplus clothing to a charity (Table 2).

### Textile disposal behaviour

In general, focus group respondents did not have a specific idea of how long they would keep clothing for. Most kept items for as long as they were wearable and stopped wearing the cheaper clothing for three main reasons: lower quality, new fashion trend and clothes were bought for a one-off event. They were more likely to retain expensive clothing, even if they no longer wore it. There were feelings of guilt related to the disposal of expensive, higher-quality items worn only a few times, and these tended to be donated to charities, whereas cheaper clothing used for socializing would quickly become unwearable because of wear and tear and were simply discarded.

Only 6.7% admitted to disposing of fashion items in rubbish bins. However, this was not mirrored by responses in the focus groups, where the vast majority of fast-fashion items were said to be discarded. Only 7.1% reported selling used fashion garments via eBay (eBay.co.uk, London, UK), car boot sales or second-hand shops. The majority of clothing, 36% was given to charity shops, and a further 7.4% was put in recycling bins collected from the home by the council or placed in textile recycling bins. Nearly one-quarter of fashion items were given to family members or friends, while a fifth of clothing was reused in the home.

Several focus group participants stated that they took items to charity shops or donated to charities via doorstep collections because it made them feel good; none had used supermarket community recycling or charitable collection bins. This is illustrated by the following statement 'If anybody else could wear them, I'd give to a charity shop. Something that was damaged, I'd put in the bin though'.

The choice of charity was determined by convenience, confirming the findings of Domina and Koch's study (2002). There was a tendency to discard clothing that was damaged because of wear and tear, was personally significant or was of 'no use' to other people. This discovery contrasts with Domina and Koch's (1997)

findings, which identified that personal attachment to and a greater investment in clothing may actually encourage textile-recycling practices, rather than hinder them. A few had sold items via eBay or in second-hand shops, some mentioned handing clothing on to other family members, some met with friends at 'swapping' parties and one had used old clothing to make new items. Older consumers, however, stated that work clothes were more likely to be worn until they were no longer wearable and would be thrown out or used as household rags and then disposed of via household refuse.

## Conclusions and implications

The findings of this study reveal that young female consumers are unaware of the need for clothing recycling. However, 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. This lack of awareness is thought to be a result of lack of media coverage. 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. Participants also stated that they might consider modifying their clothing consumption and disposal behaviour if they were more aware of the social and environmental consequences.

Most participants were sceptical as to the ultimate value or contribution to society of fast fashion and felt it encouraged a 'throwaway culture' where products and fashion lost intrinsic value, encouraging consumers to replace and dispose of products before their real life cycle had ended. Consumer awareness of ownership of excessive amounts of clothing motivates charity donation – along with convenience and altruistic tendencies. The research also highlighted that young fashion innovators were particularly disinterested in recycling. However, some were used to 'swapping' their clothing with friends because they only wanted to wear fashion clothing a few times or handed them on to other family members. On the other hand, some did not do this because they disliked the idea of someone else being seen in their clothing. This suggests that fashion innovators experience an emotional attachment to their clothes and merits further study.

This study did not, however, identify what would make consumers contribute towards increasing the reuse and recycling of textiles. While respondents were mindful of the greater quantities of clothing being produced and sold, they had little interest in the potential social, environmental or ethical impact and felt that any steps they took to try to reduce their fashion consumption or disposal behaviour would be insignificant in the grand scheme of things. In the future, the media may be able to help alter consumers' disposal habits by providing more information about sustainable consumption in the area of fashion clothing, and local councils by increasing consumer awareness of textile-recycling provision along with glass, paper and plastics.

Because fashion purchasing, especially in the 17–25 years age bracket, is so closely related to the influence of the fashion press and celebrity culture, it would seem logical that these very media could be used as appropriate vehicles for disseminating textile recycling information to this group. A pertinent example of television playing a role in raising the profile of clothes swapping is

the recent BBC series 'Twiggy's Frock Exchange' (BBC, 2008). As the name suggests, participants exchange items of clothing and accessories with each other, giving them a new lease of life.

With charity stores receiving so much clothing nowadays, to be almost at saturation point, it is more crucial than ever to educate consumers about the different recycling options available to them and to make these as convenient as possible.

While this survey was targeted at young female consumers because this is the group whose attitudes need to be changed, it is recognized that it would be useful to extend the survey to a wider audience to ascertain whether different groups, such as males or other female age groups, have different attitudes to textile disposal methods.

As highlighted in a recent study by Frame and Newton (2007), the government and other advocates of sustainable consumption must endeavour to better understand the consumer motivations and attitudes towards textile disposition to reduce the amount of textile waste sent to landfills in the future. This study has highlighted that, overall, there is concern about the environment, but there is no correlation between awareness of the environment and textile disposal behaviour and the attitude to textile reuse and recycling. Fast-fashion retailers now need to take responsibility for the amount of fashion clothing sold through their stores by instigating programmes in terms of textile disposal methods similar to those implemented by Marks & Spencer to increase the reuse and recycling of fashion clothing.

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