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Eco-fashion adoption in the UAE: Understanding consumer barriers and motivational factors

Abstract: This paper explores the scope of eco-fashion and identifies the barriers and motivational factors to eco-fashion adoption in the United Arab Emirates (UAE). The key objective is to identify strategies that will influence consumers to perceive eco-fashion more favorably. A total of 20 participants were selected for the in-depth interviews. The two main barriers that surfaced from the interview data were lack of awareness and availability of eco-fashion clothing. Other noteworthy barriers that were identified were lack of brand association, higher cost of eco-fashion clothing, cheap and readily available fast fashion, an overload of information, boring and unattractive styles, no incentive to purchase eco-fashion and perceptions of poor quality. The main motivators were availability, awareness, celebrity and brand endorsements. In addition, brand, style, comfort, affordability, engaging marketing communications were other important motivators. This study for the first time examines the barriers and motivational factors of eco-fashion adoption in the UAE, as no study has been conducted even on related topics in the Middle East. Awareness was identified as one of the main barriers to eco-fashion adoption, which is a new finding owing to the geographical difference between the previous and the current studies.

Keywords: Eco-fashion, Barriers to Eco-Fashion, Sustainability, Eco-Friendly Fashion, Eco-Fashion Motivators, Second-hand Clothing.

Introduction

Consumption over the last few decades has become a key topic when looking at the drivers of global warming and climate change. The fashion industry, in particular, has been criticized for promoting fast consumption of clothing and accessories, resulting in increased amounts of clothing going to landfills globally. The resources needed to produce one kilogram of cotton include 7000 to 29,000 liters of water and about 1 kilogram of oil (Vats and Rissanen 2016) but the average consumer is generally unaware of these figures when discarding a garment, a decision usually prompted by new fashion trends replacing older ones, and the availability of fast trends in the market (Engstrom and Nicklasson 2015). According to Siegle (2017), about a hundred billion garments are produced every year, with a large percentage of produced garments wasted due to production issues (such as an order wrongly placed or dyeing issues). Based on the United States Environmental Protection Agency's report, 12.8 million tons of clothing is sent to landfills each year in the US alone (EPA 2019). Earlier the fashion-conscious consumers would at least wait for six months before disposing of their clothes, however, due to fierce competition and offshore manufacturing, the turnaround time from purchase to disposal has been reduced to weeks now (Joy et al. 2012).

Despite the awareness of consumers with regards to the sustainability issues, very little attention has been paid to understanding the motivation of consumers in the UAE with regards to eco-fashion clothing. The scope of this study is limited to understanding eco-fashion motivators only although other terminologies such as ethical fashion, slow fashion and sustainable fashion have similar objectives. An important aspect that needs attention is that the drivers for over-consumption are still not completely explored in the literature (Ariela and Ironico 2011).

Although eco-friendly fashion has a reasonable customer base, it is still classified as a niche market, only limited to environmentally aware consumers. Most producers, designers, and retail houses still struggle to understand how they can align their eco-friendly products with the customer's expectations of style and aesthetics (Niinimäki 2010). Some designers have been revolutionary in converting discarded clothing into "upcycled" and desirable fashion that appeals to the consumer's preference for design and aesthetics. This change in approach has led to an increase in their target market; which is not just limited to consumers who are ethically and environmentally sensitive but also appeals to young and trendy fashion lovers (Myers 2014).

Discussion of the problem

The United Arab Emirates (UAE) had generated more than twenty million tons of waste in 2014, and only twenty-five percent of the total waste generated was recycled. The amount of solid waste generated in the capital city of Abu Dhabi in 2017 was 9.6 million tons (Statistics Centre 2017). The UAE government has been trying to raise awareness and construct anti-waste measures, but a more in-depth

understanding of the problem is needed (Khaleej Times 2015). In the year 2006, the World Wildlife Fund declared that the UAE had the world's largest ecological footprint per capita owing mostly to carbon emissions and wastage (Fox News 2007). The extreme wastage can be attributed to the fact that landfills are still quite affordable in this region. At present, Dubai - the UAE's largest and most populous city produces an alarming quantity of 2.8 million tons of waste that goes into the landfill (Tesorero 2018). The waste management authorities of Dubai have predicted that by the year 2050, if the rate of consumption continues to follow the current trajectory, Dubai would require an area twice the size of Palm Jumeirah to accommodate its landfill needs. Efforts to reduce waste should include re-thinking clothing waste, and encouraging direct reuse as second-hand clothes or recycling, in addition to a change in consumer attitude and behaviors. Data on clothing waste and fashion sustainability are scarce in the region, driving the purpose of this study, which is to address this gap in the available literature on fashion sustainability in the UAE.

Research questions:

1. What are the barriers that prevent consumers from adopting eco-fashion in the UAE?
2. What are the motivational factors that have a positive influence on their purchase of eco-fashion?

Literature review

Eco-friendly fashion includes clothing that is either recycled, vintage, second-hand or made in a way that reduces the overall negative impact on the environment by limiting the use of harmful chemicals (Eriksson and Karlsson 2014). Not only are the fibers grown organically, but even the fabric is also made without the use of harmful dyes and bleaches. Eco-fashion advocates the use of organic fibers such as cotton, jute, hemp, bamboo that have a significantly lower ecological footprint (Aaijaz and Ibrahim 2010). Sarkar (2016) in her paper argued that eco-friendly clothing also includes vegan clothing which is animal and cruelty-free. In addition to recycled and vintage clothing, leased or rented clothes are considered as eco-friendly as well. New ideologies such as 'minimalism' also support the objectives of eco-friendly fashion (Wagner et al. 2017). The literature is indicative of the fact that eco-fashion is a futuristic approach to ensure sustainability in the fashion industry.

Trends in consumer choices have seen some significant changes in the recent past and the majority of their purchase decisions can be attributed to convenience and habit rather than on environmental concerns (Aaijaz and Ibrahim 2010). Sarkar (2016) argued that aesthetic appeal, style, and trendiness are some of the key attributes customers actively seek in fashion clothing. Although eco-fashion has a positive impact on the overall sustainability of the planet, it has limited appeal for fashion-conscious consumers. Fashion is an effective tool used by consumers to show off their material wealth, status in the society and their individual preference in style, and environmental concerns have the least influence on the fashion choices made by them

(Kim et al. 2013). At times consumers' perceptions of sustainability are limited to the consumption of energy and recycled goods, without recognizing sustainability issues inherent to the consumption of clothing. This provides an understanding of how consumer awareness of environmental issues does not necessarily translate into avoidance of buying fast fashion and adoption of eco-friendly fashion (Yan et al. 2017). This view has been supported by Goworek et al. (2012) in their study on sustainable clothing, wherein they state that consumer awareness of issues linked to sustainability has little impact on their purchase decision, and they choose the style and lower price over eco-friendly fashion. Even the consumers who regard themselves as environmentalists do not actually purchase eco-friendly clothing, thus reinforcing the notion that style and price are still key factors in consumer purchase motivation. However, increased awareness of fashion sustainability has led to fashion consumers questioning the environmental and social impact of fast fashion (Kim et al. 2013). This concern is being evidenced by the increase in the sale of eco-friendly products, however, mainstreaming of eco-fashion is still in its early stages.

Barriers to eco-fashion purchase

In the study conducted by Perry and Chung (2016), the higher cost was the most important reason for not purchasing eco-fashion. Although consumers understand the objective of eco-fashion clothing, they cite affordability as a key barrier in adopting it. Consumers cannot be motivated to change their purchasing behavior unless the fashion industry provides some other alternatives that do not expect them to pay a premium price for making eco-friendly fashion choices (Pedersen and Andersen 2015). As eco-fashion is still a niche sector, it is extremely challenging to compete based on price as these companies do not enjoy the economies of scale benefits as compared to their fast fashion counterparts (Goworek et al. 2012). The higher price of eco-fashion along with a wide variety of readily available and affordable fast fashion contributes towards consumers adopting the 'throwaway fashion' culture. Some of the leading fast-fashion clothing companies such as Zara, Topshop, H&M offer clothes at extremely competitive prices and act as barriers to sustainable consumption owing to the fact that consumers dispose of their clothing after wearing them only for a few times (Birtwistle and Moore 2007). Although high price acts as a barrier to eco-fashion consumption; a completely different perspective has been shared by Doval et al. (2013) in their paper where they argue that even low prices of eco-fashion brands can at times act as a barrier owing to consumer's price-quality inference.

In addition to price, consumers bring forth the issue of availability and access to eco-friendly clothing as another significant barrier; considering eco-fashion is still a niche sector and availability of eco-friendly clothing is very limited. Second-hand clothing, which is considered eco-friendly has its own set of barriers of which individual and cultural aspects are the most prominent. The fear of being perceived as frugal or poor, hygiene and sanitary aspects further deter consumers from adopting eco-fashion (Perry and Chung 2016; Yan et al. 2015; Norum and Norton 2017). The

impact of culture is evidenced in the study conducted by Xu et al. (2014) where a high majority of consumers in the USA were willing to purchase second-hand clothing, while in China the percentage was a meager ten percent. In addition to these individual factors, situational factors such as awareness of second-hand stores and the time needed to shop at second-hand stores act as further barriers. Research on the topic highlights the fact that most consumers are unenthusiastic about purchasing second-hand clothing (Norum and Norton 2017). This lack of enthusiasm can be explained by the fact that consumers emulate celebrities and wealthy people (Armstrong et al. 2016), therefore choosing clothing that is second-hand is a direct contradiction to their aspiration of being perceived as someone with higher social status.

Some of the other barriers to sustainable consumption can be the lack of transparency in the entire supply chain (Vehmas et al. 2018). Eriksson and Karlsson (2014) argued that a general understanding of the location of production of the clothing, the materials used to produce it and knowledge of wash and care are essential to understand the lifecycle of a garment and its impact on the environment. Despite the need for consumer awareness, the fashion industry has shown very limited proactiveness in providing information about the life-cycle of clothes. Therefore, the consumers rely on their own, limited, knowledge and awareness to make purchase decisions with regards to eco-friendly fashion (Pedersen and Andersen 2015). On the other hand, overburdening consumers with information pertaining to green and eco-fashion has not been successful too. In some cases, companies marketing their eco-fashion efforts were suspected of greenwashing (Iqbal 2011). Although most literature on eco-fashion considers natural fibers and eco-fabrics to be sustainable, yet eco-fabrics have also been criticized for having a higher impact on the environment as compared to synthetic fibers in some studies (Bly et al. 2015).

Another criticism of eco-fashion is that apart from environmental benefits the consumers do not see any added value with regards to the function of the clothing (Perry and Chung 2016). High quality, style, and comfort are essential attributes that consumers actively seek when purchasing clothing (Vehmas et al. 2018), therefore it is essential to ensure that eco-brands integrate these attributes into their clothing design. Kostadinova (2016) argued that consumers perceive eco-clothing to be synonymous with compromise. Throughout the literature, it is evident that most consumers show a 'pro-sustainability' attitude, however, this attitude has a limited reflection on their behaviors. Therefore, it can be implied that a gap exists between the consumer's attitude and their behavior (Armstrong et al. 2016; Wagner et al. 2017) and their purchase decisions might not necessarily represent their values and beliefs (Vehmas et al. 2018).

Motivational factors

Consumers evaluate fashion clothing based on several attributes and a variety of metrics. It is therefore very important to understand the consumer's motivational

factors that influence their clothing purchase decision. Eco-fashion brands should align their products and strategies to suit the expectations of the consumers.

The cost of the garment plays an important part in motivating the consumer to use it for a longer duration. Consumers tend to discard inexpensive clothes without any guilt (Saicheua et al. 2012). In a study conducted by Yan et al. (2017) consumers reported that they would be willing to buy eco-friendly clothing if it is of superior quality with a higher price tag, but they were not keen on purchasing second-hand clothing and repair or mend their old clothes. Other research studies confirm that consumers are motivated to pay a higher price for eco-fashion if the garment is of high quality (Davis 2011). There has been a gradual shift from quantity to quality when it comes to the purchase of clothing, making way for the 'slow fashion' phenomenon, where the consumers hold on to the fashion clothing for longer if they feel the item is of a high quality (Magnuson et al. 2017). Doval et al. (2013) and Magnuson et al. (2017) argued that consumers will be motivated to buy eco-fashion if that leads to an enhanced social status. In this case, they expect to pay a premium price for eco-friendly clothing to differentiate themselves from the public. Reimers et al. (2017) found that "altruism, status enhancement, perceived consumer effectiveness and happiness have a significant effect on consumers' attitudes towards environmentally responsible clothing". Contrary to these arguments is the perspective that cost also acts as a barrier to eco-fashion consumption. Magnuson et al. (2017) argued that consumers will be motivated to purchase eco-clothing if the combined cost of searching the clothing, the actual price of the clothing and the travel time together does not surpass the expected benefits.

Convenience is another factor that influences consumer motivation in the purchase of second-hand clothing. Consumers are not willing to spend an excessive amount of time and energy to search for eco-friendly fashion clothing. Therefore, eco-brands should attempt to mainstream their merchandise and make them readily available (Magnuson et al. 2017; Perry and Chung 2016).

Style is an important motivator for purchasing fashion clothing. A well-designed unique piece of clothing made with high-quality eco-fabric will attract the attention of even the less dedicated sustainable fashion consumers (Davis 2011). This study resonates with the case of Refazenda, a sustainable clothing company in Brazil, which focusses on comfort, style and value addition to the garments in the form of traditional embroidery and lacework to appeal to the emotional and cultural sensibilities of the consumers (Pessoa et al. 2015). Considering the case of organic cotton; consumers buy clothing made up of organic cotton primarily for its environmental benefits and to support organic farmers, which is evident of the fact that awareness and information of eco-friendly clothing materialize into a positive purchase decision (Goworek et al. 2012). Therefore, being environmentally responsible should be marketed as an additional attribute of eco-fashion clothing and not a trade-off for being stylish. As being environmentally sensitive is a moral

standard, the guilt of not being environmentally responsible leads to pro-environmental attitude and behavior (Kabadayi et al. 2015)

Consumers prefer brands that they are familiar with, therefore eco-clothing brands should rely on effective communication strategies and eco-labeling to provide the necessary assurance to the consumers (Kostadinova 2016). Eco-labeling or also known as ‘green labeling’ provides in-depth information about the eco-friendly attributes of the clothing that might otherwise not be available to the consumers. In addition to looking at what motivates the consumer, there are several things retailers can do to encourage eco-fashion sales. They can focus on in-store displays to communicate the environmental benefits of purchasing eco-friendly clothing. Companies should take more ownership of the sustainability issues in the fashion industry and create awareness through ‘green marketing programs’ and corporate social responsibility initiatives as these have a positive influence on consumer purchase decisions (Suki et al. 2016). With regards to second-hand fashion, the biggest challenge is the social stigma and the cleanliness concerns associated with used clothing. Second-hand stores must ensure that the clothes undergo a strict cleanliness procedure to alleviate customer fear. Consumers will be motivated to buy used clothing if the companies change the perspective that second-hand clothes are synonymous with frugality and poverty. Instead, they should project buying second-hand as a progressive and environmentally responsible behavior (Perry and Chung 2016). Some second-hand clothing stores market their clothes as vintage which has been proven as an effective strategy as it adds to the individuality and historic value of the garment. Another motivational factor that drives second-hand clothing purchase is environmental concerns, but this finding cannot be generalized as the research conducted was limited to young college students who are known to display a higher level of pro-environmental behavior (Yan et al. 2015).

In addition, with the help of celebrity endorsements the reach and appeal of eco-friendly clothing can be further enhanced (Davis 2011). A new approach to marketing; namely “cause-related marketing” has been instrumental in involving celebrities to promote various social and environmental causes. According to a report by Nielsen, consumers worldwide are ready to pay a higher price for goods produced by brands that value sustainability (Thamaraiselvan et al. 2017). Celebrities in several countries have tremendous influence over consumers, therefore celebrity endorsement is an effective strategy to persuade consumers to purchase eco-friendly fashion (Nunnelley 2012).

Gap analysis

It is evident from the literature on the topic that there are gaps in research, as hardly any study has been conducted on the topic of eco-fashion barriers and motivational factors in the United Arab Emirates (UAE). There is a paucity in the literature related to the Middle East region even on related topics of sustainable clothing, effects of fast fashion and ethical clothing.

The majority of the studies on eco-fashion have been conducted in the US, UK, Sweden, and parts of South-East Asia. In addition to the geographical concentration of the studies, even the sample profile of the studies is very homogenous. A very high percentage of researchers have focussed only on young female consumers from fashion colleges. Research indicates that young college students demonstrate higher pro-environmental behavior in comparison to other members of the population (Yan et al. 2015). Therefore, this study attempts to fill these research gaps by studying these aspects in relation to male and female working and non-working professionals in the UAE, who have no connection to the fashion industry. Also, as research confirms that second-hand clothing purchase is common when there are limited financial resources (Yan et al. 2015), therefore the survey participants were chosen at the middle to the high-income bracket to understand their approach to second-hand clothing.

Methodology

This study is aimed at understanding the barriers and motivational factors of eco-fashion adoption of consumers in UAE. A qualitative methodology was chosen to get an understanding of “the thoughts and feelings of the research participants” (Sutton and Austin 2015; Berg 2007). Most research studies conducted in the area have adopted the quantitative methodology to examine the number of people adopting eco-fashion. However, this study focusses primarily on why people don't purchase eco-fashion and the factors that will motivate them in adopting eco-fashion.

Qualitative data was collected in the form of in-depth open-ended interviews. The rationale for choosing interview as the research instrument is that “interviews compared to questionnaires are more powerful in eliciting narrative data that allows researchers to investigate people's views in greater depth” (Alshenqeeti 2014).

The participants chosen had no association with the fashion industry. It was important to ascertain this fact, as prior knowledge and awareness of the sustainability issues in the fashion industry would have had an influence on their response. A total of 20 participants were interviewed and the profile of all the participants has been indicated in table 1.2. The heterogeneity of the samples closely represents the population. The participants included working and non-working males and females between the age group of 25 to 50. UAE is a country with a very high percentage of expatriates. The main population of UAE consists of 28% Indians, 13% Pakistanis, 11% Emiratis, 7% Bangladeshis, 6% Filipinos, 4% Egyptians and 3% Sri Lankans (Abudhabi2 2016). Therefore, 6 Indians, 3 Pakistanis, 2 Emiratis, 1 participant each from Bangladesh, Philippines, Egypt and Sri Lanka and 5 from other nations were selected for the study. Only those participants were chosen who demonstrated a positive attitude towards the environment, but the attitude did not translate into an eco-fashion purchase or consumers who were environmentally conscious but unaware of the availability of eco-fashion. This was ascertained by conducting a 5-minute interview prior to the main interview and candidates who did not fulfill this criterion were not included in the study. Quota sampling method was used for this study as it

ensures that the strata represent the population accurately. This method was convenient and saved time as it did not require a sampling frame (Sharma 2017). The majority of research studies in the past have concentrated only on young female students, however, in this study working professionals and male participants have been included as well. The rationale for choosing such a sample was to ensure that higher cost of eco-fashion clothing, which had been identified as the key barrier to eco-fashion consumption in the major literature (Birtwistle and Moore 2007; Perry and Chung 2016) did not interfere with the identification of other barriers that were not cost related. Young consumers have lower disposable incomes and therefore are extremely price sensitive. By choosing a sample that has a mix of working and non-working males and females, the research will provide a more holistic understanding of the key barriers and motivational factors of the consumers.

All the interviews were conducted personally, and the interview sessions were audiotaped with prior consent from the participants. Each interview ranged from 20 to 25 minutes and was later transcribed verbatim. The interviews were coded based on pre-set codes and later categorized into themes. In social sciences, the two-step coding method has been extensively used, where data generation is the first step and classification of data into similar codes or themes is the second (Alshenqeeti 2014). This research followed the two-step coding method in order to reduce the overwhelming amount of data that was collected. A pseudonym of participant 1 to 20 was provided to each participant to ensure anonymity. The researcher also maintained a folder that consisted of ‘field notes’ of non-verbal cues presented by participants in terms of expressions and body language that helped in providing a context during data interpretation (Sutton and Austin 2015).

Table 1– Sample Profile

Name	Gender	Age	Nationality
Participant 1	Female	31	Indian
Participant 2	Female	28	Indian
Participant 3	Female	37	Indian
Participant 4	Female	18	Indian
Participant 5	Female	36	Pakistani
Participant 6	Female	21	Pakistani
Participant 7	Female	20	Bangladeshi
Participant 8	Female	30	Egyptian
Participant 9	Female	28	Emirati
Participant 10	Female	36	Srilankan
Participant 11	Female	50	Filipino
Participant 12	Female	27	Chinese
Participant 13	Female	29	Spanish
Participant 14	Female	35	Nigerian
Participant 15	Male	31	Indian

Participant 16	Male	19	Indian
Participant 17	Male	20	Pakistani
Participant 18	Male	32	Emirati
Participant 19	Male	30	Czech
Participant 20	Male	24	Ivoirian

Results

Barriers to eco-fashion adoption

a. Limited understanding of the meaning of eco-fashion

The detailed analysis of all the interview transcripts unveiled that the majority of respondents lacked awareness with regards to eco-fashion. In response to a question asked about their understanding of eco-fashion, some of the answers were “clothing that is not made using synthetic fibers”; “clothes made in cottage industries”; “affordable and economical fashion.” Some of the respondents stated that “all clothing made up of cotton fibers is eco-friendly as it is not harmful to the environment.” Although 2/3rd of the participants knew that eco-friendliness relates to the environment and the conservation of natural resources, but their understanding was vague, and they were not able to draw the linkage between clothing and its impact on the environment. Some respondents who had prior knowledge about eco-friendly products used some common terminologies to define it such as “recycled”; “environment-friendly”; “not harmful” and “organic.” The aspect that was noteworthy was that none of the participants had purchased eco-friendly fashion in the UAE. Some of the participants who identified themselves as environmentally conscious and regularly bought organic food and other green products were not certain about their decision to purchase eco-friendly clothing. The lack of awareness of eco-fashion clothing surfaced as one of the key barriers in this study. Most of the participants did not have prior knowledge while some had a reasonable understanding of eco-fashion. All of them requested for more information on the topic.

“I would say ignorance as you can’t consume what you don’t know! I have heard this terminology for the first time today.”

(Participant 5)

“I have never come across a store or a brand selling eco-fashion in the UAE. I don’t actively seek eco-fashion.”

(Participant 2)

“I have never seen any of my favorite brands sell eco-fashion.”

(Participant 13)

“I was not aware that eco-fashion exists, therefore have never purchased. No one educated me, nor did I take any initiative to educate myself on this matter.”

(Participant 11)

Some consumers who had reasonable levels of knowledge mentioned that information itself was the barrier. Excessive noise and overload of information were a deterrent to the overall shopping experience. A few of the respondents complained that too much information and jargons make the information extremely complex to comprehend.

“These kinds of products are generally presented in a very unattractive manner and there is an overload of information. Shopping is a fun experience and extensive reading to understand the clothing’s attributes is not my idea of fun.”

(Participant 3)

b. Poor availability of eco-fashion

Some of the participants mentioned that they have never seen an eco-friendly clothing tag in any of the retail stores in the UAE. They stated that they would consider purchasing eco-friendly clothing if the clothes were made more accessible by brands and retailers. They expect their favorite brands and popular retail outlets to carry these lines and also educate the customers about them proactively.

“I have never seen an eco-fashion label or a tag in the stores and I had no particular interest in especially looking for it as I don’t know what it stands for!”

(Participant 17)

“Generally, I always buy from my favorite brand outlets, and if I find eco-friendly clothing that suits my style and budget in those outlets, I would definitely consider buying it.”

(Participant 3)

c. Affordable fast fashion vs expensive eco-fashion

Most of the respondents believed that eco-friendly clothing was very expensive and catered only to the affluent segment of the society who could afford the higher price. Some of the assumptions of the respondents were that eco-friendly clothes are very expensive, therefore not suitable for young consumers. A few of them also mentioned that cost was one of the main reasons for not actively seeking eco-friendly clothing. They drew comparisons with expensive organic food that caters to a niche segment to make the price inference. Retail is one of the most prominent sectors in the UAE with most fast fashion brands having a significant presence in this region. Year-round sales and promotions on popular brands and retail outlets provide a huge variety of affordable clothing to the consumers, which validates the responses of the participants.

“I feel these types of clothing will not fit into my budget.”

(Participant 13)

There are so many brands that sell trendy and stylish clothes that are cheaper than eco-fashion, so I do not see any real incentive in investing time and money.”

(Participant 8)

“Eco-fashion does not match my preference in terms of cost, brand, and style. There are so many affordable options to buy clothes from that I do not feel the need to go looking for eco-fashion.”

(Participant 10)

d. Unattractive styles and perceived quality

A few respondents mentioned that eco-friendly clothing was generally dull and unfashionable. They believed that eco-friendly clothing was rugged and lacked appeal. It is apparent that they had certain preconceived notions about eco-fashion such as “inferior quality” and “clothing sold at flea markets”. Some of them admitted to buying organic food but not organic fashion as they did not see any personal incentive in clothing purchase.

“First of all, the clothes are boring and not trendy, and on top of it, they are expensive! Then, one has to go looking for them as they are not readily available in many outlets in the UAE. So, what is the point in buying them?”

(Participant 8)

“I am a bit skeptical about the quality of eco-fashion clothing. I am concerned about the durability of such clothing after wash. I have generally seen them in the flea markets only, so I am not very keen.”

(Participant 12)

“I like colorful and vibrant clothes that are stylish and trendy, but I feel eco-fashion is not suitable for my age as the clothes are generally monochromatic and very minimalistic; which is not my style. I buy organic produce, but I don't feel there is any real incentive in buying organic clothing that is so expensive.”

(Participant 16)

“Eco-fashion does not match my preference in terms of cost, brand, and style. There are so many affordable options to buy clothes from that I do not feel the need to go looking for eco-fashion.”

(Participant 10)

e. Culture, hygiene, and lack of variety: second-hand clothing

The survey was designed to question participants on both the barriers to purchasing new eco-fashion clothing and second-hand clothing, in order to capture nuance in respondent's perceptions to each separately. Out of twenty participants, only three had purchased second-hand clothing in the past when they were students. They also stated that second-hand clothing offers a limited variety to choose from. They argued that considering fast fashion is available at extremely low prices in the UAE, second-hand clothes cannot be marketed purely from the cost perspective. All the participants were concerned about the hygiene aspects of second-hand clothes. The Asian and Arab respondents cited culture and upbringing as the main barriers to second-hand clothing adoption; whereas respondents from other nationalities were more concerned about quality, style, and variety.

"For me, it is very important to know who wore the clothing, so hand me downs are fine but second-hand is a strict no! Hygiene is the reason I do not prefer buying second-hand clothes."

(Participant 5)

Although participant 5 was unwilling to buy second-hand clothes, she showed great interest in buying second-hand luxury clothing and clothing worn by celebrities. Therefore, hygiene as the stated reason for avoiding second-hand clothing is questionable

"I think it is because of my upbringing and the culture that I grew up in. Buying clothes was a joyful experience and related to festivals and second-hand clothes are a complete taboo. I would rather wear my existing clothes for a longer duration than purchase second-hand clothes. For me, hygiene is secondary, culture is the main barrier!"

(Participant 15)

"Yes, I would buy second-hand clothing. I am concerned about the environment. The earth is burdened too much! If the clothes are clean, fashionable and look good on me, then why not?"

(Participant 14)

Motivational factors

Eco-friendly clothing purchase motivators as per the data collected were availability, awareness, celebrity and brand endorsements. The majority of the participants considered brand, style, and affordability as important motivational factors. More than half the participants also expressed that engaging marketing communications would incentivize them to purchase eco-fashion.

a. Brand, style and aesthetic appeal

For most of the participants, exclusivity, design and style were the primary motivators. The respondents mentioned that if brands market their products well then perhaps even simple clothing would be attractive to the consumers. The

consumers unanimously agreed to the fact that aesthetically pleasing pieces of clothing offered by a popular brand are one of the key considerations in their clothing purchase. It implies that it is not adequate to just carry a line of eco-friendly clothing; it is also essential to ensure that style and appeal are paid equal importance to.

“For me, the brand is the most important. Cotton t-shirts are generally all the same, simple and plain, but why are people willing to pay three times the cost for a simple Nike or Adidas t-shirt with the brand logo? If my favorite brand retails it then I will surely buy!”

(Participant 3)

“If the brand is popular and the piece of clothing is comfortable then it is worth it. So, if eco-fashion is stylish and trendy there is a higher chance of me purchasing it. Also, price is a huge consideration for me!!!”

(Participant 13)

“Comfort is the main thing, and it should come from a good brand as that is the first thing that attracts me. Then, of course, it should be unique and trendy.

(Participant 10)

“If the brands that I regularly buy from retail these and the clothes are fashionable and fit well, then I will surely consider buying but just based on environmental benefits...no!”

(Participant 5)

b. Affordability and availability

Respondents were convinced that the availability of eco-fashion in regular stores and preferred brands would be one of the key motivational factors for eco-fashion purchases. Most of them stated that price would also be a huge consideration for them as they would be willing to buy eco-fashion only if it is affordable. It was evident from their responses that the idea that eco-friendly clothing has a positive impact on the environment was a bonus; not the primary motivator for the purchase.

“Exclusivity, style, and brand are the primary motivators. The environment is important to me, but I have never linked clothing purchase to environmental impact.”

(Participant 1)

“I feel they (eco-fashion labels) should meet the customer in the middle, if it is too expensive I will not buy it as there are plenty of cheaper options available...but I am willing to pay a little extra if the clothing lives up to the quality and benefits that it is proposing.”

(Participant 8)

“Price is an important factor as UAE offers so many fast-fashion clothing options that I would need a huge motivation to spend extra money on something that I am not even 100% sure whether it is eco-friendly or not.”

(Participant 17)

c. Marketing communications: brand & celebrity endorsements

Celebrity and brand endorsements are important factors in motivating consumers to adopt eco-fashion. 75% of the respondents declared that it would be a significant incentive for purchase if a brand or celebrity shares information pertaining to eco-fashion clothing attributes and its positive impact on the environment. Respondents suggested that celebrity endorsement would encourage consumers that are currently not interested in sustainable consumption by creating more visibility and affinity for eco-friendly clothing. As the majority of respondents expressed that they look forward to emulating their favorite celebrities, a high potential emerges for celebrity endorsements to increase awareness on fashion sustainability and the popularity of eco-fashion brands.

“I feel eco-fashion labels should market themselves better as we don't really know about them. I feel they should use celebrities to endorse their products and then I would totally buy eco-fashion and hashtag them!”

(Participant 16)

“Eco-fashion companies should make their products available in regular stores and advertise better. We hardly hear about them!”

(Participant 6)

If my favorite celebrities promote eco-fashion then it would be a huge motivation for me to buy.”

(Participant 10)

The brands should not just retail eco-fashion, but also educate the consumers on eco-fashion clothing advantages .”

(Participant 7)

“Brands should use creative ways of communicating about eco-fashion!”

(Participant 8)

d. Transparency and assurance

Some of the consumers were skeptical about eco-friendly clothing in general. They mentioned that there are no standards to gauge whether a product is actually providing the benefits that it promises. They mentioned a lack of transparency and the prevalence of greenwashing as the main causes of their skepticism.

“If the brands sell and make it clear through labels and advertisements the positive elements of such clothing...then maybe!”

(Participant 18)

“I feel I would require assurancethat I am actually getting what I have been promised...some sort of label or tag would be helpful.”

(Participant 14)

Discussion and conclusion

All the participants believed that there was limited availability of eco-fashion in the UAE. As indicated by the research it is the key barrier to eco-fashion adoption in the region. This result supports studies conducted earlier that concluded that lack of availability of eco-fashion limits its adoption by consumers (Perry and Chung 2016; Yan et al. 2015; Norum and Norton 2017). However, the literature is silent on the topic of eco-fashion awareness, which has been identified in this study as a significant barrier to eco-fashion adoption. This difference in the research outcomes could be related to the geographical location of the studies. The majority of the studies have been conducted in the United States, Europe, and South East Asia, whereas this study has been conducted in the UAE. It can be inferred that consumers in this region lack awareness on this subject and brand communications on this topic are weak.

It is evident from the data collected from the interviews that the high price of eco-fashion, and at times the mere perception of a higher price discourages consumers from eco-fashion purchase. This finding is consistent with the literature, as the price was cited as the key barrier in eco-fashion adoption (Pedersen and Andersen 2015; Perry and Chung 2016). The majority of the respondents were also of the opinion that if their favorite brands retail eco-fashion then they would surely consider buying. This finding is similar to the arguments presented by Kostadinova (2016), where she states that brand familiarity is a significant consideration in clothing purchase. Perceptions of poor quality is another barrier mentioned by the participants that discourage them from eco-fashion purchase. This could be due to the price-quality inference consumers make while purchasing second-hand or cheaper recycled fashion (Doval et al. 2013). Overload of information was also considered as a significant barrier.

The data collected on second-hand clothing purchases reveals that there is a common pattern in the responses. Participants from India, Pakistan, Bangladesh, Srilanka, China, Egypt, and the UAE did not prefer buying second-hand clothes, whereas participants from Sweden, Czech Republic, and Spain were comparatively more comfortable with the idea. This finding has been supported by the study conducted by Xu et al. (2014) and could be attributed to cultural differences between these countries. Davis (1992) argued that “meanings of clothing are cultural in the same way that common understandings about the music we listen, the food we eat, furniture, health beliefs, in short, ‘the totality of our symbolic universe’ are cultural.”

The key motivational factors identified in the study are availability and awareness of eco-fashion, celebrity and brand endorsements, branding, style, comfort, and affordability. Participants confirmed that they would be willing to consider eco-fashion if they have reliable information about its environmental attributes. They stated that their purchase decision would be highly dependent on their favorite brands embracing the cause and introducing an eco-friendly line. In addition, quality along with style and trendiness has been highly regarded as important motivators. The emphasis on the perception of quality by respondents is confirmed by previous research conducted by Yan et al. (2017), where they argued that consumers are willing to pay a higher price for eco-fashion if they consider it to be of high quality.

The majority of the respondents were also of the opinion that celebrity endorsements and engaging ways of communication are significant elements that will motivate them to adopt eco-fashion. This finding has found support in earlier studies conducted by Nunnelley (2012) and Davis (2011). The participants stated that greater awareness on the topic of eco-friendly clothing attributes is essential in motivating consumers. Two participants mentioned that word of mouth is an important aspect too, as some brands greenwash their products, therefore consumers do not always rely on marketing communications and need added assurance. This result supports a previous study conducted by Iqbal (2011), which mentions that excessive communication of eco-fashion's sustainability goals have been rejected by consumers because they suspected the brands of greenwashing.

The research findings indicate that fast fashion cannibalizes the market for second-hand clothing in the UAE as it meets consumer demand at a low cost making second-hand clothing purchase relatively unattractive. Some participants are willing to purchase second-hand clothing if they are assured that it has been cleaned properly and meets hygiene standards, and they believe that if celebrities endorse second-hand clothes then they will find more acceptance with the general consumer. However, the participants argued that the low cost of second-hand fashion cannot be marketed as the sole benefit, as fast fashion offers many affordable alternatives that are reasonable in quality and are currently on-trend and style. Birtwistle and Moore (2007) also agree that fast fashion companies are obvious barriers to eco-fashion adoption as they offer a large variety of affordable clothing.

Some of the participants agreed that they are concerned about the clothing industry's impact on the ecology but they do not feel that eco-fashion adoption will contribute towards any significant outcome. They argued that the main criteria for buying clothes are style, price, fit, brand and comfort, therefore sustainability is rarely a consideration. Moreover, this study found that consumers in the UAE are often confused by the several terminologies associated with eco-fashion such as "recycled", "reused", "organic" and "second-hand". A larger awareness of the differences between these categories should be created in the UAE so that eco-fashion is not rejected conceptually based on just one aspect that does not resonate with a particular consumer or consumer group preference.

Limitations and future studies

The study has been conducted in the UAE and has been limited by the lack of existing data on fashion sustainability and fashion waste. Future studies on waste relating to the fashion industry, as well as fashion sustainability across the garment lifecycle would be beneficial. As lack of awareness has been identified as one of the key barriers to adopting eco-fashion in the study; future studies can further investigate the reason for limited awareness of eco-fashion in the UAE. As the reasons for a lack of awareness on eco-fashion was not evident in the literature reviewed on the topic, the study can also be conducted from a global perspective. Furthermore, as this study confirmed cultural bias against second-hand clothing in the UAE, the impact of culture on second-hand fashion adoption can also be an interesting area to explore in future research studies.

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