Upama Nasrin Haq[1], Tania Akhter Ite[2]
[1] *Bangladesh University of Textiles (BUTEX), Faculty of Fashion Design and Apparel Engineering,*
Department of Apparel Engineering, Tejgaon, Dhaka, Bangladesh
[2] *Simon Fraser University, MA in Economics, Burnaby, British Columbia, Canada*

Exploratory Study of Textile Undergraduates' Knowledge and Perception towards Eco-Friendly Clothing in Bangladesh

Raziskovalna študija znanja in zaznavanja okolju prijaznih oblačil dodiplomskih študentov tekstilstva v Bangladešu

Corresponding author/*Korespondenčna avtorica:*
Upama Nasrin Haq, Assist Prof
E-mail: upamahaq@butex.edu.bd
Phone: +8801792795686
ORCID ID: 0000-0003-4114-8557

Abstract

Environmentalism leads to the concept of eco-friendly clothing (EFC) and its popularity is advancing all over the world. In-depth knowledge acquisition regarding EFC has become a fundamental requirement for Bangladeshi Textile undergraduates as they are the future professionals in the EFC sector. To ascertain the knowledge level and perception of the Bangladeshi textile undergraduates regarding EFC was the aim of this study. In this exploratory study, a self-administered questionnaire was used to collect data through purposive sampling from the students enrolled into the Bangladesh undergraduate Textile Engineering programme. The respondents were 282 students of the fourth year of different universities located in Dhaka city. Descriptive statistics were used to represent the findings of the research. The results showed that 82.3% of the respondents were informed about EFC, 35.8% were knowledgeable regarding EFC raw materials and 53.02% were cognisant about the production process. 89.4% of the respondents expected one particular course on EFC in curriculum and 94% wanted to contribute towards EFC in the future. The study revealed that undergraduates have a knowledge gap regarding EFC, while their willingness to learn and contribute is very optimistic. The findings suggested that the evaluation and modification of the curriculum for EFC and incorporation of EFC courses can lessen this salient gap.
Keywords: eco-friendly clothing, textile undergraduate, knowledge, perception, curriculum

Izvleček

Okoljevarstvo vodi do koncepta Okolju prijaznih oblačil, s katerim se srečujemo po vsem svetu. Poglobljeno pridobivanje znanja o okolju prijaznih oblačilih je postalo temeljna zahteva dodiplomskega študija tekstilstva v Bangladešu, katerega študenti so bodoči strokovnjaki v oblačilnem sektorju. Glavni cilj študije je bil ugotoviti raven znanja in zaznavanja okolju prijaznih oblačil dodiplomskih študentov tekstilstva v Bangladešu. V raziskovalni študiji je bil uporabljen vprašalnik za zbiranje podatkov s pomočjo namenskega vzorčenja študentov, vpisanih v bangladeški dodiplomski študijski program tekstilnega inženirstva. Anketiranih je bili dvesto dvainosemdeset študentov četrtega letnika z različnih univerz v Daki. Za prikaz ugotovitev raziskave je bila uporabljena deskriptivna statistika. Rezultati so pokazali, da je 82,3 odstotka

anketirancev seznanjenih z okolju prijaznimi oblačili, 35,8 odstotka jih je bilo seznanjenih s surovinami za izdelavo okolju prijaznih oblačil in 53,02 odstotka s proizvodnim procesom tovrstnih oblačil. Kar 89,4 odstotka anketirancev je pričakovalo poseben predmet o okolju prijaznih oblačilih v predmetniku, 94 odstotkov pa jih želi prispevati svoj delež k izdelavi okolju prijaznih oblačil v prihodnosti. Študija je pokazala, da imajo dodiplomski študenti vrzel v znanju o okolju prijaznih oblačilih, medtem ko sta njihova pripravljenost za učenje in prispevek k izdelavi tovrstnih oblačil zelo optimistična. Ugotovitve kažejo, da lahko vrednotenje in sprememba predmetnika ter vključitev predmetov o okolju prijaznih oblačilih zmanjšajo ugotovljeno izrazito vrzel.

Ključne besede: okolju prijazna oblačila, dodiplomski študij tekstilstva, znanje, zaznavanje, učni načrt

1 Introduction

Clothing industries have both social and environmental negative externalities [1, 2], whereas the environmental loss is the most significant among all other magnitudes [3–5]. The negative impact of mass industrialisation is well cited in previous researches [6–10]. Like many other industries, clothing industries are responsible for environmental pollution predominantly through the dyeing, printing, finishing process [11], and garment washing, which increase solid waste in nature [12]. Clothing manufacturing processes release harmful substances, e.g. pesticides, heavy metals and toxic chemicals into the atmosphere [13], which affect biodiversity and human life as well [14]. As a result, textile industries have received increasing attention from environmentalists, suppliers, retailers, designers, consumers and politicians [15]. To reduce the environmental damage by textile products and clothing, the term "eco-fashion" became popular with fashion designers in the recent past [10, 16]. In a general definition "The clothing that causes minimal to zero harm to the environment, produced by organic fibres, in absence of toxic dyes and chemicals, takes into account the human health is called eco-friendly clothing (EFC)" [17-19]. Green, organic, natural, environment and sustainable terms are also used instead of "eco" during promotional practice [20] and in scholarly research [21, 22]. There are many options applied in the textile industry to make clothing environment friendly, e.g. use of sustainably grown fibres like organic cotton, bamboo, hemp or others which require less pesticides and irrigation [23]. Payne [24] and Eryuruk [25] pointed out the "life-cycle thinking in design process" as an alternative route to make clothing eco-friendly. Another approach is the recycling of postconsumer plastic bottles [26] made of polyethylene terephthalate (PET) to weave fabrics [27]. Developing countries are endeavouring to bring consciousness along with sustainable practice to mitigate the environmental impact of textile processing [28, 29]. EFC can reduce the negative impact on the environment by using responsibly sourced products which are either renewable or sustainably harvested [30]. Similarly, Kutsenkova [31] states that sustainable clothing or EFC is produced to reduce textile waste, environmental depletion and unethical treatment of workers. Considering the AASHE (The Association for the Advancement of Sustainability in Higher Education) "sustainability" definition, EFC should be produced by "encompassing human and ecological health, social justice, secure livelihoods and a better world for all generations" [32].

Global environment friendly clothing production and consumption has increased rapidly [33], as has consumers' preference to eco-friendliness [34, 35]. As a result, the demand of green products [36] and EFC has increased significantly [37, 38]. Consumer behaviour in recent era is often influenced by the environmental impact of the clothing which was neglected before [39–41]. Moreover, consumers are becoming aware regarding the clothing they wear and its effects on the environment [42]. Therefore, many pieces of research mainly focus on consumer purchasing intention and perception towards EFC [43–49]. The influencing factors of EFC (eco-labelling strategy, aesthetic value, style, price, comfort, quality and awareness) are well investigated in previous researches [50–56]. Barriers to EFC were also mentioned by Laitala et al. [57], Witek [58] and Young et al. [41]. Surprisingly, fewer researches exist on the exploration of EFC or sustainable fashion awareness and purchasing intension among the textile undergraduates, who are the future professionals in this sector [6, 10]. Additionally, a limited number of research studies on curriculum assessment, exploration of textile and apparel undergraduates' knowledge regarding sustainability and EFC [59, 59]. Landgren and Pasricha [60] concluded the importance of teaching the sustainability concept.

Brosdahl & Carpenter [61] conducted a study on assessing textile and apparel undergraduates' environmental knowledge, concern and responsibility regarding clothing. Kim and Damhorst [62] developed a scale to measure the textile and apparel undergraduates' knowledge about the environmental impact of clothing. Furthermore, Kim and Johnson [63] identified the automation and mass customisation as the most influencing factors for impending apparel production by exploring the perception of apparel undergraduates. To the most excellent of our knowledge, no investigation has been conducted on the EFC perception for Bangladeshi textile undergraduates.

Bangladesh has been receiving an increasing order of EFC from several multinational brands to prevent environmental pollution as it is the second largest exporter of apparel [64, 65]. In the very near future, the nation will require an adequate sum of experts in EFC or sustainable clothing. Kantane et al. [66] stated the changes of demand in career field, asking to change the approach to the main principle of the education system. However, there has been no research addressing how we can prepare the textile undergraduates or pre-professionals for the challenges they will meet in executing sustainable practices in the clothing industry in Bangladesh. The assessment of curriculum compatibility with the employment trend is barely a topic for research in the education system of Bangladesh [67]. The textile education is not an exception and is included in this outline. There is no information on the assessment of the Bangladeshi textile undergraduates' knowledge, curriculum content and overall EFC perception to date. If universities cannot prepare sufficient workforce with contemporary textile knowledge on EFC, clothing industries will face a shortage of necessary human capital to meet the future demand for it. It can create impediments in the position of the second largest exporter since Bangladesh faces the challenge of product diversification [64, 68]. The clothing manufacturers in Bangladesh have taken several initiatives for diversifying apparel products to meet the increasing demand [69] and 40% of them have introduced new products as exportable items [70]. As EFC is a diversified, growing demand product and links to clothing sustainability [60, 71], it is high time to explore the textile undergraduates' knowledge and perception regarding it. Kilbrink and Bjurulf [72] stated that the knowledge learned in institutions is a vital issue of job performance. It

also affects the decision making of the career field [73]. It acts as a catalyst for students' attitude to change [74] and can stimulate action [75]. Kallgren and Wood [76] stated that knowledge is used as experiences for future tasks and curriculum is the key to lessen the knowledge gap and modify the education system [77]. Hence, relevant knowledge about EFC is imperative to develop the eco-friendly attitude and make textile undergraduates decisive for future need.

1.1 Research objectives

The aim of this paper was to investigate the textile undergraduates' knowledge and perception towards EFC in relation to curriculum and willingness to contribute towards the EFC issue in the future. The study also emphasises the existing curriculum contents about EFC. This exploratory research will provide textile educators with the understating of undergraduates' knowledge and perception towards EFC. The findings will also provide a lens to understand if further modification is required in the existing curriculum to educate the future workforce properly.

2 Methodology

2.1 Design or approach

An exploratory research approach was followed to evaluate the knowledge and perception towards EFC of the undergraduates' of the Textile Engineering programme. The respondents are enrolled in different universities located in Dhaka city of Bangladesh.

2.2 Population and sampling technique

In standard curriculum, there is no specific course on EFC or sustainability in the Textile Engineering programme of Bangladesh; however, students of the fourth year are taught about clothing sustainability and environmental impact of clothing at two specific courses, i.e. "Environmental Studies" and "Textile & Apparel Merchandising" [78]. The selected topic is embedded in these two courses. The target population of this study are the fourth year students of the undergraduate Textile Engineering programme in Bangladesh. Textile Engineering institutions of Bangladesh provide a BSc degree in Textile Engineering with majors in Yarn Engineering, Fabric Engineering, Wet Process Engineering, Apparel Engineering, Textile

Engineering Management, Textile Fashion Design, Industrial and Production Engineering, Textile Machinery Design and Maintenance, Dyes and Chemical Engineering, and Environmental Science Engineering. The topics included in the aforementioned two courses are environmental impact of textile production, sustainable production process, characterisation and control of textile waste, environmental law, new methods of automatic process control, overview of merchandising, key responsibilities, fashion trends, technological innovation in fibres and fabrics, and analysis of trend and future demand of clothing market. Individual respondents were selected by means of purposive sampling.

2.3 Questionnaire design and data collection

Data collection was performed through a self-administered questionnaire based on the research objectives. The questionnaire was prepared by following the literature on eco-friendly clothing and finalised after the evaluation of two clothing sustainability experts. The questionnaire was designed with a combination of four sections, where the first one was comprised of socio-demographic information of the respondents, the second part contained the fundamental questions about EFC and the curriculum was the third part in the questionnaire. The final section was about the respondents' willingness to contribute to the EFC sector as their dedication can make significant alterations. The option of responses were multiple choice (e.g. "From where did you come to know about EFC?"), yes-no (e.g. "Do you know the manufacturing process of EFC?") and Likert-type scale items (e.g. "To what extent do you agree or disagree with the statement "Satisfactory information included in the existing curriculum on EFC"). In total, there were six demographic questions, six basic questions to measure the knowledge level and eight questions to assess the perception of EFC. Two research assistants were trained up by the principle investigator for data collection with a detailed guideline about the questionnaire. For data collection, faculty members of corresponding institutions were contacted via email or phone for permission to conduct the survey during their lecture. A pilot test was carried out in one of the textile institutions in Dhaka in Bangladesh. The final data consists of 282 respondents with a 94% response rate. Textile undergraduates outside Dhaka are not considered in the study due to the lack of formal approval from corresponding textile institutions.

2.4 Data analysis

Descriptive statistics (frequencies, percentages and central values) were performed by the software SPSS 20 to characterise the collected data. Responses to demographic contents, multiple-choice and Likert-type scale item were used in the results – discussion part of data analysis.

3 Results and discussions

The following subsections provide detailed findings of respondents' demographic characteristics, knowledge level and perception in the context of curriculum and interest to contribute towards EFC.

3.1 Demographic information of respondents

Table 1 shows the demographic information of the respondents. 83.3% of the respondents are male and 16.7% female students. The cultural prospect is explained as a determinant of such a higher portion of male students since traditionally, boys are encouraged towards the scientific domain of study like engineering, which is considered a male-dominated profession [70, 80]. The median age of the respondents is 23.5 years and over half of them are between 23 and 25 years old.

Table 1: Demographic characteristics of respondents

Demographic categories	Frequency (n)	Share (%)
Gender		
Male	235	83.3
Female	47	16.7
Age (in years)		
< 23	126	44.7
23–25	149	52.8
> 25	7	2.5
University grant type		
Public	81	28.7
Private	201	73.1

3.2 Textile undergraduates' knowledge regarding EFC

Firstly, informed respondents were distinguished in the study to investigate their knowledge level. The informed or aware respondents are those of the total respondents who have heard about EFC from different sources before this survey (cf. Table 2).

Afterwards, four basic questions about EFC (production process, raw materials and suitable fibres) were included in the questionnaire to further investigate the informed group of respondents (cf. Tables 3–5).

Table 2: Awareness and source of knowledge of respondents informed about EFC

Source of knowledge about EFC	Awareness about EFC	
	Yes	No
University course	104	
Family/friends	21	
Seminar/workshop	23	
Newspaper/Magazine	38	50
Social Media	40	
Others	6	
Total	232	
Share (%)	82.3	17.7

It is evident that most of the respondents were familiar with the term EFC. 82.3% of the respondents were well-aware about the term. They have learned about EFC from different sources. Among this informed group of respondents, the majority of them have learned about it from their undergraduate course (44.82%), 17.24% from social media, 16.37% from newspapers or magazines, 9.9% from various academic seminars or workshops, 9.05% from friends and relatives, and the rest have learned about EFC from other sources (2.57%). The response to knowledge sources varies and 55.18% of aware respondents have heard the term from other sources apart from university courses. The absence of specific courses on EFC in the existing curriculum is a plausible reason behind this unusually high percentage. Additionally, 17.7% of the respondents were found entirely unaware of it. They became familiar with the term during the survey. 51% of these unaware respondents are from a particular institution where no informed respondents were found. 49% are scattered in another two institutions to which also informed respondents belong. It should be a matter of concern for textile institutions, educators and manufacturers since EFC is the latest trend in the clothing industry [81]. The lack of awareness about it may create an internal threat towards the advancement of the sustainable clothing industry in Bangladesh. Hur and Cassidy [82] stated that the lack of knowledge on sustainability is one of personal and organisational challenges which need to be overcome for a sustainable clothing practice. Kantane et al. [66] stated that awareness is the most significant factor considered by employers. As product knowledge always influences the adaptation of new products [83, 84], professionals are increasingly interested in accumulating knowledge regarding sustainable clothing [21] and hiring knowledgeable workers. Hence, universities need to prepare the undergraduates with relevant knowledge of EFC for future. The findings in Tables 3, 4 and 5 also suggest this statement. Brosdahl and Carpenter [61] concluded that students' learning through a university course about the clothing environmental impact is more effective than the students' learning through mass media.

53.02% of the informed respondents have the knowledge about how EFC is produced. 71.55% of that group ruminate that the production process of EFC is more complicated than conventional clothing (cf. Table 3), while conventional clothing and EFC production are fundamentally similar except for the assembly, use and disposal of environmental concerns [34].

Raw materials are essential for EFC manufacturing as an appropriate selection of raw materials can minimise the overall environmental impact of clothing during its life cycle [34]. The respondents were further asked to choose the features of the raw

Table 3: Knowledge about production process of EFC

Knowledge about manufacturing process of EFC	Process complication of EFC compared to conventional clothing		Frequency (n)	Share (%)
	Yes	No		
Yes	95	28	123	53.02
No	71	38	109	46.98
Frequency (n)	166	66	232	
Share (%)	71.55	28.45		100

Table 4: Knowledge about features of EFC raw materials

Response of students	Frequency (n)	Share (%)
Organic	98	42.2
Sustainable	26	11.2
Recycled	25	10.8
All of the above	83	35.8

material of EFC. 42.2% of the respondents know that EFC is produced only from organic material, 11.2% think about sustainable material and 10.8% about recycled material. 35.8% of the informed respondents have adequate knowledge about the raw materials of EFC as they correctly respond to all of the features that can make clothing eco-friendly (cf. Table 4). The valuable characteristics of eco-friendly materials are renewable, biodegradable, non-toxic, recyclable and reusable [34, 85]. Moreover, EFC materials include ethics, energy consumption and sustainability of resource consumption [86]. Chen and Lewis [87] stated that the material choice of EFC incorporates the environmental impact from production to disposal of the finished clothing.

Table 5: Response to suitable fibres for EFC

Response of students	Frequency (n)	Share (%)
Conventional Cotton	122	52.59
Organic cotton	86	37.07
Bamboo	5	2.16
Hemp	6	2.58
Flax	0	0
Recycled polyester	13	5.60

On identifying or responding to suitable fibres, 52.59% of the aware respondents believe that conventional cotton is the only suitable fibre for EFC, whereas it consumes a massive amount of water [88] and harmful toxic chemicals during its production [89–91]. Globally, conventional cotton consumes 22.5% of all insecticides [92] and 2.6% of the full water footprint [93]. On the other hand, 37.07% believe that organic cotton is suitable for EFC (cf. Table 5). Organic cotton is produced without any harmful chemical fertilisers and pesticides [94]. Basically, growing organic cotton is a systematic approach of organic forming [95] and the best choice to avoid environmental damage [92]. 2.16% and 2.58% of the respondents selected bamboo and hemp, respectively, as suitable fibres for EFC (cf. Table 5). The percentage is comparatively lower than for other fibres. It is evident that the majority of aware undergraduates are not well informed about bamboo or hemp as a sustainable or environment friendly fibre. Bamboo fibres have vast application areas for being a sustainable material [96]. It is one of suitable fibres for EFC [81] as it is biodegradable, renewable and can be grown without pesticides or other chemicals [64, 97]. Furthermore, merely 4.9% know about recycled polyester, which is another indication of their inadequate knowledge since recycled polyester has emerging applications in the clothing factory [98].

3.3 Curriculum perception

Curriculum planning is imperative to teach a particular course at a college or university level programme [99] as knowledge level and performance are relevant to the programme curriculum [100]. Although courses on EFC are absent in the existing curriculum, overall curriculum perception regarding EFC is considered in this study. The outcomes of the curriculum perception investigation are summarised in Tables 6 and 7.

Table 6: Undergraduates' response regarding existing curriculum on EFC

Response of students	Satisfactory information included in existing curriculum on EFC		Received information from academic seminar/workshop on EFC	
	Frequency (n)	Share (%)	Frequency (n)	Share (%)
Strongly disagree	36	12.8	48	17.0
Disagree	43	15.2	52	18.4
Neutral	80	28.4	59	20.9
Agree	98	34.8	97	34.4
Strongly agree	25	8.9	26	9.2

Table 7: Undergraduates' expectation regarding curriculum

Response of students	Willing to learn more about EFC through curriculum		Need one special course on EFC in curriculum	
	Frequency (n)	Share (%)	Frequency (n)	Share (%)
Strongly disagree	5	1.8	7	2.5
Disagree	9	3.2	4	1.4
Neutral	42	14.9	19	6.7
Agree	79	28.0	87	30.9
Strongly agree	147	52.1	165	58.5

Concerning the curriculum, 43.7% of the respondents are satisfied (either agreed or strongly agreed) with the information on EFC that they receive from their institutions through the existing curriculum. Similarly, 43.6% either agreed or strongly agreed on obtaining the necessary information through a seminar or workshop. On the other hand, 28% of the respondents disagreed and 28.4% remained neutral about the existing curriculum. 56.3% of the respondents answered unfavourably about the academic seminar or workshop on EFC (cf. Table 6).

The respondents' expectation regarding the curriculum was also examined in the study. Both, the informed and unaware respondents, were found interested in learning about EFC from their course contents. 80.1% of all respondents either agreed or strongly agreed to learn more about EFC. Furthermore, 89.4% of the respondents expect a minimum of one particular course on the details of EFC from their existing curriculum (cf. Table 7). The findings of the respondents' knowledge and curriculum perception raise the questions of the existing curriculum modification regarding clothing sustainability or EFC. The respondents' inconsistent responses on the fundamental questions regarding EFC and curriculum perception provide a clear indication about the requirement for specific courses on EFC in the existing curriculum. Palma et al. and Cezarino et al. also emphasised the inclusion of sustainability in the subjects of the educational curriculum in their studies [101, 102]. A well-defined and organised curriculum, consisting of the theoretical and practical framework, can help educators prepare undergraduates with current knowledge and improve outcomes [103,104]. Ellis [105] stated that an academic curriculum is a knowledge-centred curriculum where students are expected to acquire knowledge as a foundation of their future life. Coate and Barnett [106] stated that curriculum is the key concept of university study and it is the cornerstone of knowledge, learning and understanding. They mentioned that ideas of higher education are put into action in society through the curriculum. Hence, a contemporary curriculum on EFC contents will facilitate awareness among textile undergraduates, which will help them in their future careers.

3.4 Willingness to contribute towards EFC

The manufacturers and retailers of the clothing industry are attempting to meet the demand for EFC [107,108] due to the emerging demand for it [109]. As textile undergraduates are future professionals of the clothing industry, it is necessary to explore how they perceive EFC and how they want to contribute to this sector. Firstly, they were asked about the prospect of EFC in the clothing industry. 65.6% of the total respondents believe that EFC will be the future face of the clothing business (cf. Table 8). The findings support the results obtained in Tables 6 and 7. Csanák [16] and Mora et al. [21] stated that eco-fashion is a part of the sustainability trend and will be a great topic of all fashion forums.

Table 8: Students' opinion about future of EFC in clothing industry

Response of students	Frequency (n)	Share (%)
Yes	185	65.6
No	7	2.5
Not sure	90	31.9

In contrast, 31.9% of the respondents are not sure about the prospect of EFC. This high percentage is unusual as respondents are textile undergraduates. The responsibility goes to textile institutions and educators to make them aware of EFC as universities are the centres of knowledge sharing

[110]. Similarly, Kong et al. [75] identified public education as a knowledge source of sustainable fashion products. Therefore, it is necessary to provide a more contemporary curriculum supported by accurate information on EFC.

Table 9: Undergraduates' willingness to contribute towards EFC

Response	Frequency (n)	Share (%)
Yes	265	94.0
No	17	6.0

94.0% of the respondents showed interest to contribute to the future development of EFC in Bangladesh (cf. Table 9). This was further investigated, namely how these optimistic students may keep a role in the future development of EFC (cf. Table 10). Among them, 52.4% want to contribute through research which is admirable since Gam [111] stated that the understanding of the EFC sector needs more research in purchasing behaviour and others. Along with the inclusion of EFC and sustainability course, an extensive research facility within the university is also necessary to achieve a satisfactory knowledge level of the students [102]. 11.3% of the respondents want to become entrepreneurs and 14.2% want to innovate new business ideas to promote EFC. Ozdamar Ertekin and Atik [112] described that an innovative business model for ecological clothing can make a tremendous effect to move people away from the phenomenon of fast fashion.

Table 10: Ways of contribution to EFC by undergraduates

Response of students	Frequency (n)	Share (%)
Research	145	52.4
Developing awareness	48	17.0
Innovating business ideas	40	14.2
Entrepreneur	32	11.3

17% of the EFC enthusiastic students have a goal to create awareness by sharing information among consumers in the future through the help of mass media (cf. Table 10). Buzzo and Abreu [113] stated that social networks can drastically make alterations in the fashion world. Moreover, it can enable the perception of the product's value to the user [114].

4 Conclusion

Internationally, EFC is one of the leading concepts in the clothing industry and sustainable fashion. Its growing global acceptance may reduce the environmental damage considerably. In this study, Bangladeshi textile undergraduates' knowledge of EFC from their existing curriculum was evaluated. After analysing the undergraduates' knowledge and perception towards EFC, three notable findings were revealed in the study. The first one is the knowledge gap about EFC among Bangladeshi textile undergraduates. Secondly, it can be said that the students' perception of EFC, along with their interest in learning and contribution, is very optimistic for the Bangladeshi clothing industry. Thirdly, a critical evaluation and modification are needed of the existing curriculum of the Textile Engineering programme to synchronise with more profound concepts of EFC. Therefore, the most plausible solution to mitigate this state of reverse direction is to incorporate EFC and sustainability courses in the existing curriculum of the Textile Engineering programme. In this way, textile universities and educators can prepare future professionals for the impending sustainable clothing industry. This study is one of the first assessments of knowledge and perception towards EFC for Bangladeshi textile undergraduates. However, it had some limitations. The main limitation of the study was the small sample size. A census on all textile undergraduates may provide more in-depth information, considering time and cost. Secondly, the study did not evaluate the curriculum of EFC related courses of the universities. A curriculum evaluation may provide further information about the inconsistencies observed in the findings. Further research on the investigation of the knowledge and perception towards circular fashion and clothing sustainability, along with an assessment of the existing curriculum regarding these topics, would give more comprehensive results about the sustainability education of Bangladeshi textile undergraduates.

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