

# CONSUMER BEHAVIOR TOWARDS RECYCLED CLOTHING

Olga Timofei\*,

[o\\_timofei@yahoo.com](mailto:o_timofei@yahoo.com)

Victoria Iordachi\*\*,

[timush\\_v@yahoo.co.uk](mailto:timush_v@yahoo.co.uk)

Rodica Perciun\*\*\*

[perciun.rodica@ase.md](mailto:perciun.rodica@ase.md)

**Abstract:** *In a world increasingly concerned about environmental issues, the fashion industry is witnessing a notable shift in consumer behaviour towards recycled clothing and sustainable fashion. This trend reflects a heightened awareness of the detrimental impact of traditional clothing production on the planet. Annually, the fashion sector consumes 79 billion cubic meters of water, accounting for approximately 20% of global water usage, and emits 1.7 billion tons of CO<sub>2</sub>, nearly 10% of global emissions, while generating 92 million tons of textile waste. Given the projected growth of the global fashion industry, addressing its substantial environmental and social impacts is crucial. Integrating sustainability practices across the supply chain is imperative. Consumers play a pivotal role in driving this change by making informed choices, demanding transparency from brands, and supporting sustainable products and practices.*

*This article explores consumer behaviour towards recycled clothing, in order to understand the factors that influence consumers' purchase decisions and to identify the barriers and motivations that affect their attitude towards it of recycled clothing. In order to achieve this goal, the study "Consumer Behaviour towards Recycled Clothing in the Republic of Moldova. By elucidating perceptions and behaviours, this research offers insights crucial for fostering responsible consumption and advancing sustainable fashion strategies in the region.*

**Keywords:** *sustainable fashion, consumer behaviour, recycled clothing, eco-friendly apparel, circular economy, environmental awareness, textile waste.*

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\* PhD., associate professor, National Institute for Economic Research, Academy of Economic Studies of Moldova, Chisinau, Republic of Moldova.

\*\* PhD., associate researcher, National Institute for Economic Research, Academy of Economic Studies of Moldova, Chisinau, Republic of Moldova.

\*\*\* PhD. Hab., professor, National Institute for Economic Research, Academy of Economic Studies of Moldova, Chisinau, Republic of Moldova.

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## Introduction

In a world increasingly concerned about environmental issues, the fashion industry is experiencing a significant change in consumer behavior. Recycled clothing and sustainable fashion are gaining ground, reflecting a growing awareness of the negative impact that traditional clothing production has on the planet.

Each year, the fashion industry consumes 79 billion cubic meters of water, representing approximately 20% of global water usage, emits 1.7 billion tons of CO<sub>2</sub>, nearly 10% of global emissions, and generates 92 million tons of textile waste<sup>1</sup>. These environmental impacts exacerbate climate change, contributing to more frequent and severe natural disasters such as floods, droughts, storms, and rising sea levels<sup>2</sup>. Table 1 presents a comprehensive overview of the fashion industry's environmental footprint, highlighting the significant impact across various sustainability metrics.

**Table 1: Environmental Impact of the Fashion Industry**

Impact Category	Amount	Additional info
Water Consumption	9 cubic meters per EU citizen (2020)	2,700 liters for a single cotton t-shirt
Land Use	400 square meters per EU citizen (2020)	For growing fibers like cotton
Raw Material Consumption	391 kg per EU citizen (2020)	For clothes and shoes production
Water Pollution	~20% of global clean water pollution	From dyeing and finishing products
Microplastic Pollution	700,000 microplastic fibres	Released in a single laundry load of polyester clothes
CO <sub>2</sub> Emissions	270 kg per EU citizen (2020)	121 million tonnes total for EU textile consumption
Global Carbon Emissions	10% of total	More than international flights and maritime shipping combined

<sup>1</sup> N. Šajn, „Environmental impact of the textile and clothing industry: What consumers need to know”. *European Parliamentary Research Service* (2019): 1-10.

<sup>2</sup> S. Mishra, J. Sheetal, M. Gunjan, „The anatomy of circular economy transition in the fashion industry”. *Social Responsibility Journal*, 17.4 (2021): 524-542.

Impact Category	Amount	Additional info
Textile Waste	11 kg discarded per EU citizen annually	Only 1% recycled into new clothes
Incineration/Landfill Rate	87% of discarded clothes	Majority not recycled or reused

Source: Elaborated by the authors based on data from the European Parliament. "The impact of textile production and waste on the environment (infographics)." Published: 29-12-2020, Last updated: 21-03-2024. Available at: [https://www.europarl.europa.eu/topics/en/article/20201208STO93327/the-impact-of-textile-production-and-waste-on-the-environment-infographics]

Considering the fact that the global fashion industry is forecasted to grow from \$1.5 trillion in 2020 to around \$2.25 trillion by 2025<sup>3</sup>, it is important to address the industry's significant environmental and social impacts. As consumption rises, so does the industry's carbon footprint, water usage, and waste generation, necessitating urgent action to mitigate these effects. Sustainability practices must be integrated throughout the entire supply chain, from sourcing raw materials to manufacturing, distribution, and end-of-life disposal. In this process, consumers have an important role to play in driving change. By making informed choices and demanding transparency from brands, consumers can influence the industry towards more sustainable practices.

Consumer behaviour plays a pivotal role in shaping sustainable fashion practices, driven by increasing awareness of environmental and social responsibilities. This shift is evident in the rising demand for sustainable fashion choices and the influence of eco-conscious influencers. Strategies promoting sustainable consumer behavior, such as reducing laundering frequency and extending clothing lifespan through recycling, highlight practical steps towards sustainability.

Embracing a sustainable wardrobe based on recycled clothing aligns with sustainable development goals, emphasizing eco-friendly production and consumption practices. By opting for recycled clothing, consumers actively contribute to waste reduction and endorse environmentally responsible fashion choices. Moreover, raising awareness about the environmental and social impacts of their purchasing decisions can encourage brands to prioritize sustainability in their operations. This shift towards sustainable consumer behaviour is crucial for advancing circular

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<sup>3</sup> M. Ikram, „Transition toward green economy: Technological Innovation's role in the fashion industry". *Current Opinion in Green and Sustainable Chemistry*, 37 (2022): 100657.

fashion approaches and achieving long-term sustainability goals in the fashion industry, underscoring the transformative power of individual actions towards a cleaner, healthier planet.

This article explores consumer behavior towards recycled clothing, in order to understand the factors that influence consumers' purchase decisions and to identify the barriers and motivations that affect their attitude towards it of recycled clothing. In order to achieve this goal, the study "Consumer Behavior towards Recycled Clothing in the Republic of Moldova was elaborated".

The study uses a qualitative approach, combining bibliographic research with a detailed opinion survey conducted among consumers from different regions of the Republic of Moldova. The methodology includes random selection of participants, administration of a structured questionnaire and careful analysis of the responses obtained.

The main purpose of this research is to shed light on the specific perceptions and behaviours of Moldovan consumers regarding recycled clothing. By identifying the factors that influence purchase decisions and by exploring the barriers that can affect the adoption of this type of sustainable fashion, the study aims to provide essential insights for the fashion industry and for the development of effective strategies to promote responsible consumption in the Republic of Moldova.

Next, we will conduct a comprehensive literature review and examine best practices from international experiences. By presenting the findings of the conducted survey, we aim to enhance our understanding of consumer behaviour regarding recycled clothing. This analysis will provide valuable insights into the factors influencing consumer choices in sustainable fashion.

### **Literature review**

In the realm of recycled clothing, environmental protection, and sustainable development, numerous studies have shed light on various aspects related to these themes. Recycling clothing and textiles are emphasized as crucial components of sustainable lifestyle practices<sup>4</sup>. The disposal of clothing, which often ends up in landfills, significantly contributes to environmental issues, underscoring the importance of sustainable waste management practices<sup>5</sup>. Moreover, the textile industry

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<sup>4</sup> L.S., Kim, K. Yang, „Impacts of sustainable value and business stewardship on lifestyle practices in clothing consumption”. *Fashion and Textiles*, 2(1). <https://doi.org/10.1186/s40691-015-0043-8>, 2015.

<sup>5</sup> L. Chen, C. Chang, „Clothing disposal behavior of Taiwanese consumers with respect to environmental protection and sustainability. *Sustainability*, 12, 2020, <https://doi.org/10.20944/preprints202010.0240.v1>

has been implementing measures to reduce its environmental impact, such as increasing the use of renewable biodegradable fibers and promoting recycling<sup>6</sup>.

Consumer attitudes and behaviors play a crucial role in driving sustainable fashion practices, with studies indicating a shift towards ethical and sustainable consumption patterns among individuals, particularly in response to concerns about environmental impact and social responsibility<sup>7,8</sup>. The rise of sustainable fashion influencers and the rapid growth of the sustainable fashion industry underscore the increasing demand for eco-conscious clothing options<sup>9</sup>.

Other studies have highlighted various strategies and interventions aimed at encouraging more sustainable consumer behavior in the realm of clothing, such as laundering less frequently, washing at lower temperatures, and extending the lifespan of clothes through recycling<sup>10</sup>.

The concept of a sustainable wardrobe, which emphasizes the use of recycled clothing to support sustainable production practices and promote eco-friendliness, aligns with the principles of sustainable development<sup>11</sup> (K.P, 2024). By choosing recycled clothing, consumers can actively participate in reducing waste and supporting environmentally conscious fashion choices, thereby contributing to a cleaner and healthier planet. This shift towards sustainable wardrobes underscores the importance of individual actions in driving broader sustainability goals within the fashion industry.

Consumer behavior regarding clothing purchases, recycling, and disposal patterns plays a significant role in fostering sustainable practices

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<sup>6</sup> M.A Shirin., M.T. Stelcy, K. M. Devaki, K. Pachiyappan, „Industrial sustainability: brands that adopt upcycling and other green practices”, *International Journal for Research in Applied Science and Engineering Technology*, 10(12), 2022, 1220-1222. <https://doi.org/10.22214/ijraset.2022.48094>

<sup>7</sup> O. Gurova, D. Morozova, „A critical approach to sustainable fashion: practices of clothing designers in the kallio neighborhood of Helsinki”, *Journal of Consumer Culture*, 18(3), 2016, 397-413. <https://doi.org/10.1177/1469540516668227>

<sup>8</sup> N. Lee H. Yoon, H. Choo, „Fast fashion avoidance beliefs and anti-consumption behaviors: the cases of Korea and Spain”, *Sustainability*, 12(17), 2020, 6907. <https://doi.org/10.3390/su12176907>

<sup>9</sup> J. Jacobson, B. Harrison, „Sustainable fashion social media influencers and content creation calibration”, *International Journal of Advertising*, 41(1), 150-177. 2021, <https://doi.org/10.1080/02650487.2021.2000125>

<sup>10</sup> F. Harris, H. Roby, S. Dibb, (2015), „Sustainable clothing: challenges, barriers and interventions for encouraging more sustainable consumer behaviour”, *International Journal of Consumer Studies*, 40(3), 309-318. <https://doi.org/10.1111/ijcs.12257>

<sup>11</sup> K.P Jaheer Mukthar, C Nagadeepa, D.P. Selvaratnam, A Pushpa, „Sustainable wardrobe: recycled clothing towards sustainability and eco-friendliness”, 2024, <https://doi.org/10.21203/rs.3.rs-4181489/v1>

within the fashion industry<sup>12</sup>. By reusing and recycling clothing, individuals can significantly reduce the environmental footprint of the textile and clothing industry, leading to environmental and economic benefits for society as a whole. This shift towards sustainable consumer behavior reflects a growing recognition of the importance of circular fashion approaches and responsible clothing disposal practices in achieving long-term sustainability goals.

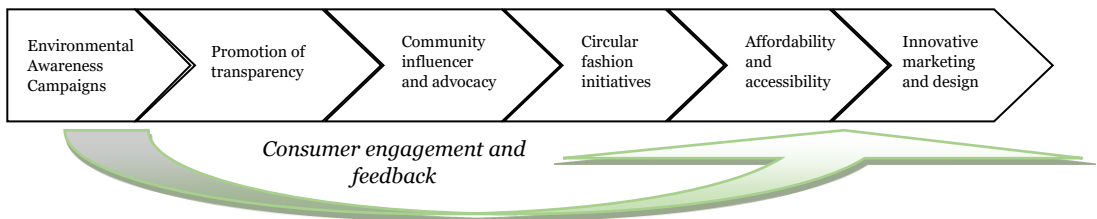
Analysing various studies in the domain of consumer behaviour towards recycled clothing reveals a growing interest and shift in consumer preferences towards sustainable fashion choices. Studies consistently highlight several key factors influencing consumer decisions:

- Consumers are increasingly aware of the environmental impact of traditional clothing production and disposal. This awareness motivates them to seek out recycled clothing as a more sustainable alternative.
- There is a perception shift where recycled clothing is no longer seen solely as a compromise in quality or style but as a viable option offering value in terms of sustainability and uniqueness.
- Consumers prioritize brands that demonstrate transparency in their supply chains and sustainability practices. Trust in the brand's commitment to environmental responsibility plays a crucial role in purchase decisions.
- The rise of social media and sustainable fashion influencers has significantly influenced consumer behaviour, encouraging adoption of recycled clothing and promoting eco-friendly fashion choices.
- Initiatives that educate consumers about the benefits of recycled clothing and the environmental consequences of fast fashion contribute to shaping consumer attitudes and behaviours.
- Cultural norms and individual lifestyle choices also influence consumer decisions regarding clothing purchases, including the adoption of sustainable fashion practices.

At the same time, research identifies several effective strategies and behaviours that promote the adoption of recycled clothing as shown in figure 1.

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<sup>12</sup> A. Paço, W. Filho, L. Ávila, K. Dennis. (2020), „Fostering sustainable consumer behavior regarding clothing: assessing trends on purchases, recycling and disposal”, *Textile Research Journal*, 91(3-4), 373-384. <https://doi.org/10.1177/0040517520944524>



**Figure 1:** Effective strategies and behaviours promoting the adoption of recycled clothing  
*Source:* elaborated by authors

As we can see from the figure 1, consumer behaviour towards recycled clothing is pivotal in driving sustainable practices within the fashion industry. By examining best practices identified in consumer behaviour research, we can discern effective strategies that foster the adoption of recycled fashion items. Educational campaigns play a crucial role, enlightening consumers about the environmental advantages of recycled textiles over conventional clothing. Transparent practices in sourcing and production build consumer trust, empowering informed purchasing decisions aligned with sustainability values.

Moreover, the influence of influencers and community advocates amplifies awareness and acceptance of eco-friendly fashion choices among diverse consumer segments. Embracing circular fashion principles, such as durability and recyclability, not only enhances product quality but also reinforces consumer confidence in recycled clothing options. Affordable pricing strategies and accessible distribution channels further democratize sustainable fashion, making it inclusive for a broader audience.

Innovative marketing initiatives that emphasize the uniqueness and style of recycled garments resonate with fashion-conscious consumers, driving demand for eco-friendly alternatives. Lastly, fostering consumer engagement through feedback mechanisms ensures that brands continuously evolve to meet sustainable fashion preferences.

Ultimately, consumers wield significant influence in shaping the future of fashion towards sustainability. By embracing these best practices, both consumers and brands can collaboratively advance towards a more environmentally conscious and socially responsible fashion industry.

By synthesizing findings from these studies, it becomes evident that consumer behaviour towards recycled clothing is multifaceted and evolving. Understanding these factors is crucial for businesses and policymakers aiming to promote sustainable consumption practices and drive positive change in the fashion industry.

Next, we present the findings of the study conducted in Moldova on "Consumer Behavior towards Recycled Clothing in the Republic of

Moldova" to better understand the factors driving consumer preferences and attitudes towards sustainable fashion.

### **Data and methodology**

This study utilizes survey data collected from a representative sample of 662 individuals across the Republic of Moldova. The demographic profile of the respondents is as follows:

**Gender Distribution:** The survey respondents include 51.1% women, 44.8% men, and 4.1% who did not specify their gender.

**Age Distribution:** Respondents span a range of age groups: 18-25 years (14.9%), 26-35 years (14.2%), 36-40 years (22.5%), 41-50 years (13.1%), 51-65 years (16.3%), and over 65 years (13.4%).

**Education Levels:** The educational background of respondents varies, with 9.5% having completed middle school, 20.7% having professional qualifications, and the majority, 66.1%, holding higher education degrees.

**Regional Representation:** Geographically, respondents are distributed across different regions of Moldova: Chisinau (19.6%), Northern region (21.4%), Central region (19.9%), and Southern region (18.1%).

**Urban-Rural Divide:** The survey includes a mix of urban (39.7%) and rural (60.3%) residents, reflecting both urban and rural perspectives.

**Occupational Diversity:** Respondents represent diverse occupations, including qualified specialists (36.5%), pupils/students (12.2%), pensioners (13.9%), and entrepreneurs (10.1%), among others.

**Income Levels:** Income distribution among respondents varies: 10.3% earn between 2001-5000 lei, 15.2% between 5001-10000 lei, 22.3% between 10001-15000 lei, 20.5% between 15001-20000 lei, and 13.9% between 20001-25000 lei.

To investigate the factors influencing attitudes and behaviours towards recycled products, we estimate the following regression model:

$$Y_i = \beta_0 + \beta_1 X_i + \beta_2 Z_i + \epsilon_i$$

Where:

$Y_i$  - Dependent variables measuring attitudes/behaviours towards recycled products

$X_i$  - Key independent variables (knowledge, experience with recycled products)

$Z_i$  - Control variables (demographic, socioeconomic factors)

$\epsilon_i$  - Error term

Dependent variables include:

- Perceived quality of recycled products (5-point scale)
- Agreement that recycled clothing meets expectations (5-point scale)
- Intention to purchase recycled clothing in the future (5-point scale)

Key independent variables:

- Knowledge about recycling (binary)
- Knowledge about recyclable products (binary)
- Previous purchase of recycled clothing (binary)

Control variables: Gender, Age, Education, Region, Urban/Rural, Occupation, Income

The model is estimated using Ordinary Least Squares (OLS) regression. Robustness checks include the use of ordered logit models for ordinal dependent variables. This analysis allows us to examine how knowledge and experience with recycled products influence attitudes and purchase intentions, while controlling for relevant demographic and socioeconomic factors.

### Descriptive statistics

To begin, we will employ a comparative descriptive statistical method, particularly calculating means and standard errors for two distinct groups: those who have purchased recycled clothing and those who have not.

The table below (see table 2) compares the mean values of different characteristics between individuals who have purchased recycled clothing and those who have not.

**Table 2:** Characteristics of people who bought recycled clothing compared to those who did not

Characteristics	Number of observations	Bought recycled clothing		Did not buy recycled clothing	
		Std. Err.	Mean	Std. Err.	Mean
Perceived quality of recycled products	662	3.821	0.068	2.987	0.071
Recycled clothing meets expectations	662	3.716	0.072	2.863	0.075
Intention to buy recycled clothing	662	3.874	0.070	3.079	0.073
Knowledge about recycling	662	0.937	0.017	0.755	0.018
Knowledge about recycling products	662	0.954	0.015	0.759	0.024
Age	662	38.105	0.963	41.418	1.002
Gender (Feminin = 1)	662	0.600	0.037	0.521	0.038
Urban residence	662	0.655	0.066	0.418	0.039
Income level	662	2.811	0.038	3.255	0.107

*Source:* Author's analysis based on survey data collected in the Republic of Moldova, 2023-2024

The table shows the characteristics of people who bought recycled clothing compared to those who did not. It is observed that individuals who have purchased recycled clothing perceive the quality of recycled products to be significantly better (3,821 vs. 2,987 on a 5-point scale) and are more inclined to agree that recycled clothing meets their expectations (3,874 vs. 3,079).

As observed, individuals who have purchased recycled clothing have a more positive perception of the quality of recycled products. This indicates they are more confident in the quality and performance of recycled clothing compared to individuals who have not purchased such products.

Additionally, we observe that those who have purchased recycled clothing have a higher level of knowledge about recycling and recyclable products, as well as a greater intention to purchase recycled clothing in the future. These differences suggest that direct experience with recycled products and a higher level of awareness about recycling are associated with more favourable attitudes and behaviours towards recycled clothing.

This difference suggests that direct experience with recycled products can improve perceptions of their quality. Those who have already purchased recycled clothing express a stronger intention to purchase such products in the future (3,874 vs. 3,079). This indicates overall satisfaction with past purchases and a greater predisposition to sustainable consumption behaviors.

Knowledge about recycling and recyclable products is significantly higher among those who bought recycled clothing. Nearly 93 percent and 95 percent of this group reports knowledge in both areas, compared to about 75 percent of nonbuyers. This suggests a possible link between the level of information and purchasing behavior.

At the same time, buyers of recycled clothing tend to be younger (average age 38.105 vs. 41.418 years) and there is a higher proportion of women among buyers of recycled clothing (60% vs. 52.1%).

Purchasers of recycled clothing are more likely to live in urban areas (65.5% vs. 41.8%) and the reported income level is slightly lower for those who purchased recycled clothing (2.811 vs. 3.255 on the scale used).

These descriptive statistics suggest that experience with recycled clothing is associated with more positive attitudes, greater knowledge about recycling, and certain demographic characteristics. The observed differences in perceived quality and satisfaction with recycled products between the two groups indicate the potential to improve general attitudes towards recycled clothing through education and exposure.

### **Results and discussions**

For a more complex and comprehensive analysis, we chose different important dependent variables and several regressors (independent variables) that could influence these variables and analysed them by the method of least squares (OLS). The OLS model allows us to examine the

impact of different independent variables on attitudes and purchase intentions related to recycled clothing while controlling for demographic and socioeconomic factors.

The results of OLS (Ordinary Least Squares) estimation for three key dependent variables in our study: perceived quality of recycled products (PERCEIVED QUALITY), agreement that recycled clothing meets expectations (MEETS EXPECTATIONS), and intention to purchase recycled clothing in the future (PURCHASE INTENTION) are presented in the table. This analysis is based on data collected from 663 respondents via our questionnaire (see table 3).

Table 3: OLS estimation results

VARIABLES	PERCEIVED QUALITY	MEETS EXPECTATIONS	PURCHASE INTENTION
Knowledge of recycling	-0,887*** (0.096)	-0.961*** (0.153)	0.381** (0.152)
Knowledge of recyclable products	0.105** (0.107)	-0.399** (0.171)	-0.776*** (0.170)
Previous purchase of recycled clothing	1,568*** (0.034)	-0.159*** (0.055)	0.006 (0.054)
Age	0.044** (0.024)	-0.168*** (0.039)	0.229*** (0.039)
Gender	- 0.110* (0.118)	0.854*** (0.188)	0.830*** (0.187)
Education level	0.342* (0.096)	-0.331** (0.154)	-1.884*** (0.153)
Urban residence	0.279*** (0.070)	-0.036 (0.112)	-1.161*** (0.112)
Income level	0.176*** (0.013)	0.417*** (0.021)	0.425*** (0.021)
Constant	-0.663*** (0.078)	4.700*** (0.124)	4.891*** (0.124)
R-squared	0.956	0.889	0.893
Observations	662	662	662

Note: Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The results of the OLS analysis provide valuable insights into the factors influencing attitudes and purchase intentions related to recycled clothing. Contrary to expectations and previous studies, we observe different and sometimes opposite effects of the independent variables on the three dependent variables:

1. Consistent with existing literature<sup>13</sup>, knowledge about recycling and recyclable products, as well as previous purchase experience, were found to be significant predictors of positive attitudes and future purchase intentions. Education level has a small positive effect on perceived quality and product satisfaction, but its effect on purchase intention is not

<sup>13</sup> N. Hasim, “Buying intentions: do knowledge, religiosity, and halal certification matter?”, *European Proceedings of Multidisciplinary Sciences* Ep MS, 2022, <https://doi.org/10.15405/epms.2022.10.28>

statistically significant. This suggests that education may influence perceptions but not necessarily purchase behaviour.

This highlights the importance of education and direct exposure to recycled products in shaping consumer perceptions.

2. Age has mixed effects: positive for perceived quality and purchase intention, but negative for expectation fulfilment. This contrasts with some previous studies which have suggested that young people tend to have more positive attitudes towards sustainable products<sup>14</sup>.

It is crucial to raise awareness campaigns and educate youth about the benefits of sustainable fashion. By integrating sustainability into school curricula and providing hands-on experiences with recycled clothing, we can foster a generation of informed consumers who are more likely to make environmentally responsible choices and advocate for sustainable practices in the fashion industry.

For instance, educational campaigns that highlight the environmental benefits of recycled materials, coupled with workshops or pop-up events where consumers can see and feel recycled clothing firsthand, have proven effective in other contexts. Countries like Sweden, known for their robust sustainability education programs and widespread adoption of second-hand clothing, demonstrate how targeted educational efforts can foster a culture of sustainable consumption. For example, at the Swedish School of Textiles, students are immersed in comprehensive education covering the entire textile value chain. This includes in-depth research spanning from fibre production and recycling techniques to design principles and textile management strategies. The school provides numerous avenues for integrating circular practices into textiles<sup>15</sup>.

A notable initiative is the ongoing research collaboration with Smart Textiles, focusing on developing innovative technologies for recycling and reusing textile fibers. Additionally, the ArcInTexETN program bridges disciplines such as architecture, interactive design, and textiles to pioneer sustainable living solutions. These educational endeavors not only equip future professionals with the knowledge and skills needed to drive sustainable practices but also foster a culture of innovation and collaboration essential for addressing environmental challenges in the textile sector.

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<sup>14</sup> G. Amoako, R. Dzugbenuku, A. Abubakari (), "Do green knowledge and attitude influence the youth's green purchasing? theory of planned behavior", *International Journal of Productivity and Performance Management*, 69(8), 2020, 1609-1626. <https://doi.org/10.1108/ijppm-12-2019-0595>

<sup>15</sup> M. Mullen, *Sweden's circular fashion industry*. Circular Innovation Lab, 2023, <https://www.circularinnovationlab.com/post/sweden-s-circular-fashion-industry>

Moreover, focusing marketing efforts on younger and urban demographics, who tend to be more receptive to sustainability messages and novel fashion trends, can amplify the impact of these educational initiatives. Brands like Patagonia, through their Worn Wear program, not only sell recycled clothing but also educate consumers about garment repair and recycling options, thereby nurturing long-term consumer loyalty and advocacy<sup>16</sup>.

This approach not only extends the lifespan of their products but also empowers consumers to make informed choices that align with their values of sustainability.

By educating consumers about repair techniques and recycling processes, Patagonia encourages a shift towards more mindful consumption patterns. This not only reduces the environmental impact of clothing but also builds trust and long-term loyalty among consumers who prioritize sustainability. Moreover, Patagonia's transparent approach to sustainability demonstrates leadership in corporate responsibility, influencing industry standards and inspiring other brands to adopt similar practices.

Continuing this trend, collaborations with educational institutions and technology innovators can further enhance the development of sustainable solutions. For instance, partnerships with research organizations can drive advancements in textile recycling technologies, promoting circularity within the industry.

By embedding these initiatives into their core business strategies, brands like Patagonia set a precedent for sustainable practices that resonate with consumers and contribute positively to environmental stewardship.

By integrating educational and experiential strategies into their marketing and outreach efforts, retailers and apparel manufacturers can not only attract a broader consumer base but also contribute meaningfully to sustainable fashion practices. This approach not only aligns with consumer preferences for eco-conscious choices but also positions brands as leaders in environmental stewardship, fostering a more sustainable future for the fashion industry.

Educational initiatives in Germany include workshops and seminars in schools that raise awareness about the environmental and social impacts of fast fashion. Programs often focus on empowering youth to make

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<sup>16</sup> M. Gwendolyn M. Feori-Payne, M. Damhorst, et., (2019), "Stories We Wear: Promoting Sustainability Practices with the Case of Patagonia: Patagonia's Stories We Wear Blog", *Family and Consumer Sciences Research Journal*, <https://doi.org/10.1111/fcsr.12340>

sustainable consumption choices and participate in clothing swap events<sup>17</sup> or upcycling projects<sup>18</sup>.

Youth-focused initiatives by organizations such as the Sustainable Apparel Coalition (SAC) in the USA include educational outreach programs in schools and universities. These programs use tools like the Higg Index to teach students about sustainability metrics and encourage them to engage in sustainable fashion practices<sup>19</sup>. Through workshops, interactive sessions, and hands-on projects, students learn how to assess the sustainability of different fashion products and brands. They are encouraged to apply this knowledge by evaluating their own clothing choices and advocating for more sustainable practices within their communities.

For example, students might conduct projects that involve analysing the environmental footprint of their favorite clothing brands, exploring alternatives that offer better sustainability practices, and presenting their findings to peers. Such activities not only deepen their understanding of sustainability issues but also inspire them to become active participants in promoting sustainable fashion.

Additionally, these programs often include guest lectures and collaborations with industry professionals, providing students with insights into real-world applications of sustainability principles in fashion. By connecting with experts and innovators in the field, students gain a broader perspective on how they can contribute to a more sustainable fashion industry.

These youth-focused educational programs play a crucial role in fostering a generation of informed and engaged consumers who prioritize sustainability in their fashion choices. By empowering young people with knowledge and practical tools, organizations like the SAC help drive a cultural shift towards more responsible and sustainable consumption patterns, ultimately contributing to the broader goals of environmental stewardship and social responsibility in the fashion industry.

The Circular Fashion Games held in Amsterdam involve youth teams collaborating with designers and innovators to create sustainable fashion

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<sup>17</sup> C.E. Henninger, N. Bürklin, K. Niinimäki “The clothes swapping phenomenon – when consumers become suppliers”, *Journal of Fashion Marketing and Management: an International Journal*, 2019, 23. 10.1108/JFMM-04-2018-0057.

<sup>18</sup> M. Blaga, M. Avadanei, A. Curteza et. “Education on Sustainable Textile Technologies and Fashion in the European Market”, *The 18th Romanian Textiles and Leather Conference Proceeding, CORTEP*, 2022, [10.2478/9788367405133-067](https://doi.org/10.2478/9788367405133-067).

<sup>19</sup> Sh. Radhakrishnan “The Sustainable Apparel Coalition and the Higg Index”. Book: *Roadmap to Sustainable Textiles and Clothing - Regulatory Aspects and Sustainability Standards of Textiles and the Clothing Supply Chain* (pp.23-57), Chapter 2, Publisher: Springer Science & Business Media, DOI 10.1007/978-981-287-164-0, (2014),

solutions<sup>20</sup>. These events promote hands-on learning and inspire young participants to champion circular economy principles in their fashion choices.

In Japan, educational campaigns such as the "ReFashion" project are instrumental in promoting sustainability among young consumers. The "ReFashion" project specifically targets youth, educating them about the numerous benefits of second-hand clothing and the importance of sustainable fashion practices. This initiative goes beyond mere awareness, actively engaging young people in practical activities that reinforce these concepts.

One of the key components of the "ReFashion" project is a series of interactive workshops held in schools and community centers. These workshops provide students with hands-on experiences in upcycling and repairing old garments, teaching them valuable skills that extend the lifecycle of clothing items. By learning how to mend and creatively alter their clothes, students gain a deeper appreciation for the resources and craftsmanship involved in garment production.

Additionally, the project organizes clothing donation drives, encouraging students to donate unwanted clothes and participate in swap events. These drives not only help reduce textile waste but also foster a sense of community and shared responsibility among young participants. By contributing to these drives, students become active participants in the circular economy, understanding firsthand how their actions can positively impact the environment.

The "ReFashion" project also collaborates with local designers and sustainability experts to host seminars and discussions. These sessions provide students with insights into the broader implications of fashion consumption, including the environmental and social impacts of fast fashion. By hearing directly from industry professionals, students are inspired to think critically about their fashion choices and consider more sustainable alternatives<sup>21</sup>.

Through these comprehensive educational efforts, the "ReFashion" project cultivates a culture of reuse and sustainability among Japanese youth. By instilling these values early on, the initiative aims to create a generation of environmentally conscious consumers who prioritize sustainability in their purchasing decisions. This shift in mindset is crucial

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<sup>20</sup> E. Hur, Eunsuk, K. Beverley, "Fostering Sustainable Fashion Innovation: Insights from Ideation Tool Development and Co-Creation Workshops", *Sustainability*, 2023, 15. DOI 15499. 10.3390/su152115499.

<sup>21</sup> M.C. Dan, A. Ciordea, S. Mayer. (2023), "The refashion circular design strategy — Changing the way we design and manufacture clothes", *Design Studies*, 88. 10.1016/j.destud.2023.101205.

for driving long-term change in the fashion industry, reducing waste, and promoting more responsible consumption patterns.

3. Female gender and urban residence are associated with more positive perceptions and higher purchase intentions, which could indicate differences in exposure to sustainability information or the availability of recycled products.

Several researches indicate that women are generally more concerned about environmental issues than men<sup>22</sup>. Women are often targeted by sustainability campaigns and educational programs. For instance, many sustainable fashion brands and organizations focus their marketing efforts on female consumers, recognizing their higher propensity to support eco-friendly products.

Given the evidence that women are generally more concerned about environmental issues than men, policymakers, educators, and businesses should:

- Develop environmental awareness and sustainability campaigns that specifically target and engage women, leveraging their higher levels of concern and propensity for action.
- Encourage and support initiatives led by women that focus on sustainability and environmental protection, recognizing their potential to drive significant positive change.
- Integrate gender-sensitive approaches in environmental education programs to enhance engagement and participation from women, fostering a culture of sustainability from an early age.

To successfully attract male consumers to recycled products, the fashion industry can adopt several strategies focusing on education, marketing, and product development.

Studies have shown that urban residents are more likely to engage in sustainable behaviors, including purchasing recycled products<sup>23</sup>. Research indicates that the density of educational and promotional activities in urban areas contributes to higher levels of environmental awareness and positive attitudes towards sustainability. Additionally, urban consumers often have more frequent interactions with brands and products that emphasize eco-friendly practices, reinforcing their positive perceptions and willingness to purchase recycled clothing.

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<sup>22</sup> J. Momsen (2000), "Gender Differences in Environmental Concern and Perception". *Journal of Geography - J GEOGR.* 99. 47-56. 10.1080/00221340008978956.

<sup>23</sup> X. Zhang, F. Dong. (2020), "Why Do Consumers Make Green Purchase Decisions? Insights from a Systematic Review", *International Journal of Environmental Research and Public Health*, (18):6607. doi: 10.3390/ijerph17186607. PMID: 32932797; PMCID: PMC7559813

Urban residents are often associated with more positive perceptions and higher purchase intentions for recycled clothing due to several factors:

- **Exposure to Sustainability Information:** Urban areas typically have better access to information and educational resources about sustainability. This includes exposure to campaigns, workshops, and media coverage that highlight the benefits of recycling and sustainable practices. As a result, urban residents are more likely to be aware of the environmental impact of their fashion choices and the benefits of recycled clothing.
- **Availability of Recycled Products:** Urban centers usually have a higher availability of stores and brands that offer recycled clothing. This increased access makes it easier for urban residents to purchase sustainable fashion. Many urban retail environments also feature dedicated sections for sustainable products, making these options more visible and attractive to consumers.
- **Cultural Norms and Trends:** Cities often set cultural trends and norms, including those related to fashion and sustainability. Urban residents are more likely to be influenced by social norms that prioritize eco-friendly practices. This can lead to a greater acceptance and adoption of recycled clothing as part of their lifestyle.
- **Income and Education Levels:** Urban populations tend to have higher income and education levels, which are correlated with increased environmental awareness and concern. Educated consumers are more likely to understand the long-term benefits of sustainable practices and are willing to invest in higher-quality, recycled clothing.
- **Marketing and Advertising:** Brands often target urban areas with their marketing and advertising campaigns, especially for new and sustainable product lines. These campaigns can effectively reach urban consumers through various channels, including social media, billboards, and events, further promoting positive perceptions of recycled clothing.
- **Community and Social Influence:** Urban residents are more likely to be part of communities and social groups that value sustainability. Peer influence within these groups can significantly impact an individual's attitudes and behaviours towards recycled clothing. When sustainability is a shared value, it reinforces positive perceptions and purchase intentions.

4. Income level has a significant positive effect on all three dependent variables, consistent with previous studies that found a positive relationship

between income and sustainable consumption behaviour<sup>24</sup>. However, it is important to note that the Republic of Moldova has some peculiarities regarding income and the intention to purchase recycled products:

- Moldova's economic landscape is different from many other countries where studies on sustainable consumption have been conducted. The average income level in Moldova is lower, and economic disparities are more pronounced. This may mean that sustainable consumption behaviours, including purchasing recycled clothing, are influenced more by factors other than income, such as cultural attitudes, accessibility, and education.
- The availability and accessibility of recycled clothing options may be unevenly distributed in Moldova, affecting consumer behaviour regardless of income. If recycled clothing is not readily available or if there is a lack of awareness about where to purchase such products, income level alone may not significantly influence purchasing decisions.
- Educational initiatives and awareness campaigns about sustainability and recycled products may not be as pervasive in Moldova. Without widespread education on the benefits of recycled clothing, even higher-income individuals may not prioritize these products. This highlights the importance of targeted educational programs to raise awareness across all income levels.
- In a developing economy like Moldova, consumers might prioritize basic needs and affordability over sustainability. Even if higher-income individuals have the means to purchase recycled clothing, their purchasing decisions may still be driven by factors such as price, convenience, and fashion trends rather than sustainability considerations.

It is important to note that our models have very high R-squared values (between 0.889 and 0.956), indicating that the independent variables explain a very large proportion of the variation in the dependent variables. This suggests that our models are robust and capture well the factors that influence purchase attitudes and intentions.

In conclusion, these results highlight the complexity of the relationships between the factors and the different aspects of attitudes and behaviors related to recycled clothing. They suggest the need for nuanced and tailored strategies to influence consumer perceptions and intentions based on their demographic and socioeconomic characteristics. Retailers

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<sup>24</sup> E. Sarigöllü, C. Hou, M. Ertz, "Sustainable product disposal: consumer redistributing behaviors versus hoarding and throwing away". *Business Strategy and the Environment*, 30(1), (2020), 340-356. <https://doi.org/10.1002/bse.2624>

and clothing manufacturers should consider these differences when developing marketing and educational strategies to promote recycled clothing.

At the same time, these results emphasize the importance of education and experience in shaping attitudes towards recycled products. They suggest that educational initiatives and opportunities to experience recycled clothing could be effective strategies for promoting more positive attitudes and increasing purchase intentions.

## **Conclusions**

The findings from our study on "Consumer Behaviour towards Recycled Clothing in the Republic of Moldova" provide valuable insights into the factors influencing attitudes and purchase intentions related to sustainable fashion in small developing countries like the Republic of Moldova.

Our study reveals a significant negative correlation between age and attitudes towards recycled clothing in Moldova, indicating that younger consumers tend to hold more favorable perceptions, possibly due to their heightened awareness of sustainability. Additionally, female gender and urban residence are associated with more positive perceptions and higher purchase intentions, indicating potential disparities in sustainability information access or product availability among different demographic groups.

Recommendations for stakeholders in Moldova's fashion industry include fostering educational initiatives aimed at enhancing sustainability awareness among consumers, leveraging their more positive perceptions towards recycled clothing:

- Developing targeted educational campaigns that emphasize the environmental benefits of recycled textiles. These initiatives should aim to increase consumer awareness and knowledge about sustainable fashion practices.
- Tailoring marketing efforts to highlight the unique attributes of recycled clothing, appealing to consumer preferences for quality, durability, and environmental stewardship. Collaborate with sustainable fashion influencers and community leaders to amplify messaging.
- Increasing accessibility to recycled clothing by expanding distribution channels and partnering with retail outlets that prioritize sustainable products. This includes online platforms and physical stores in urban and rural areas alike.
- Advocating for policies that incentivize sustainable fashion practices and promote circular economy principles. Collaborate with government bodies and industry stakeholders to create a supportive regulatory environment.

- Fostering direct engagement with consumers through interactive events, workshops, and online forums. Encourage feedback and dialogue to better understand consumer preferences and enhance product offerings.

By implementing these recommendations, retailers and apparel manufacturers in Moldova can cultivate a culture of sustainable consumption and effectively address consumer preferences for recycled clothing. These efforts not only align with global sustainability goals but also contribute to building a resilient and environmentally conscious fashion industry in small developing countries like Moldova.

## References:

Amoako, G., Dzogbenuku, R., & Abubakari, A., (2020), *Do green knowledge and attitude influence the youth's green purchasing? theory of planned behavior*. International Journal of Productivity and Performance Management, 69(8), 1609-1626. <https://doi.org/10.1108/ijppm-12-2019-0595>.

Blaga, Mirela & Avadanei, Manuela & Antonela, Curteza & Berteau, Andrei & Grundmeier, Anne-Marie & Strähle, Jochen & Wagner, Marlen & Kazlacheva, Zlatina, (2023), *Education on Sustainable Textile Technologies and Fashion in the European Market*. 10.2478/9788367405133-067.

Chen, L. and Chang, C., (2020), *Clothing disposal behavior of taiwanese consumers with respect to environmental protection and sustainability*. Sustainability 2020, 12(22), 9445.

<https://doi.org/10.20944/preprints202010.0240.v1>

Dan, M. Cristina & Ciortea, Andrei & Mayer, Simon, (2023), *The refashion circular design strategy – Changing the way we design and manufacture clothes*. Design Studies. 88. 10.1016/j.destud.2023.101205.

Hur, Eunsuk & Beverley, Katie, (2023), *Fostering Sustainable Fashion Innovation: Insights from Ideation Tool Development and Co-Creation Workshops*. Sustainability. 15. 15499. 10.3390/su152115499.

Henninger, Claudia E & Bürklin, Nina & Niinimäki, Kirsi, (2019), *The clothes swapping phenomenon – when consumers become suppliers*. Journal of Fashion Marketing and Management: An International Journal. 23. 10.1108/JFMM-04-2018-0057.

Hasim, N., (2022), *Buying intentions: do knowledge, religiosity, and halal certification matter?*, <https://doi.org/10.15405/epms.2022.10.28>

Harris, F., Roby, H., & Dibb, S., (2015), *Sustainable clothing: challenges, barriers and interventions for encouraging more sustainable*

consumer behaviour. *International Journal of Consumer Studies*, 40(3), 309-318. <https://doi.org/10.1111/ijcs.12257>

Gurova, O. and Morozova, D., (2016), *A critical approach to sustainable fashion: practices of clothing designers in the kallio neighborhood of Helsinki*. *Journal of Consumer Culture*, 18(3), 397-413.

<https://doi.org/10.1177/1469540516668227>

Ikram, Muhammad, (2022), *Transition toward green economy: Technological Innovation's role in the fashion industry*. *Current Opinion in Green and Sustainable Chemistry* 37: 100657.

Jacobson, J. and Harrison, B., (2021), *Sustainable fashion social media influencers and content creation calibration*. *International Journal of Advertising*, 41(1), 150-177.

<https://doi.org/10.1080/02650487.2021.2000125>

K.P. Jaheer Mukthar, C. Nagadeepa, D.P. Selvaratnam, A Pushpa, (2024), *Sustainable wardrobe: recycled clothing towards sustainability and eco-friendliness*. <https://doi.org/10.21203/rs.3.rs-4181489/v1>

Lee, S., Kim, H., & Yang, K., (2015), *Impacts of sustainable value and business stewardship on lifestyle practices in clothing consumption*. *Fashion and Textiles*, 2(1). <https://doi.org/10.1186/s40691-015-0043-8>

Momsen, Janet, (2000), *Gender Differences in Environmental Concern and Perception*. *Journal of Geography - J GEOGR.* 99. 47-56. [10.1080/00221340008978956](https://doi.org/10.1080/00221340008978956).

Radhakrishnan, Shanthi, (2014), *The Sustainable Apparel Coalition and the Higg Index*. [10.1007/978-981-287-164-0](https://doi.org/10.1007/978-981-287-164-0).

Mullen, M. (2023). Sweden's circular fashion industry. Available at: <https://www.circularinnovationlab.com/post/sweden-s-circular-fashion-industry>

Michel, Gwendolyn & Feori-Payne, Meegan & Damhorst, Mary & Lee, Young-A & Niehm, Linda, (2019), *Stories We Wear: Promoting Sustainability Practices with the Case of Patagonia: Patagonia's Stories We Wear Blog*. *Family and Consumer Sciences Research Journal*. 48. [10.1111/fcsr.12340](https://doi.org/10.1111/fcsr.12340).

Mishra, Sita, Sheetal Jain, and Gunjan Malhotra, (2021), *The anatomy of circular economy transition in the fashion industry*. *Social Responsibility Journal* 17.4 524-542.

Paço, A., Filho, W., Ávila, L., & Dennis, K., (2020), *Fostering sustainable consumer behavior regarding clothing: assessing trends on purchases, recycling and disposal*. *Textile Research Journal*, 91(3-4), 373-384. <https://doi.org/10.1177/0040517520944524>

Shirin Murshitha A., Stelcy Mariya T. B., Devaki, K. M. & Pachiyappan, K., (2022), *Industrial sustainability: brands that adopt upcycling and*

*other green practices*. International Journal for Research in Applied Science and Engineering Technology, 10(12), 1220-1222.

<https://doi.org/10.22214/ijraset.2022.48094>

Sarigöllü, E., Hou, C., & Ertz, M., (2020), *Sustainable product disposal: consumer redistributing behaviors versus hoarding and throwing away*. Business Strategy and the Environment, 30(1), 340-356.

<https://doi.org/10.1002/bse.2624>

Šajn, Nikolina, (2019), *Environmental impact of the textile and clothing industry: What consumers need to know*. European Parliamentary Research Service: 1-10.

Yoon, N., Lee, H., & Choo, H., (2020), *Fast fashion avoidance beliefs and anti-consumption behaviors: the cases of Korea and Spain*. Sustainability, 12(17), 6907. <https://doi.org/10.3390/su12176907>

Zhang X, Dong F., (2020), *Why Do Consumers Make Green Purchase Decisions? Insights from a Systematic Review*. International Journal of Environmental Research and Public Health, (18):6607. doi: 10.3390/ijerph17186607. PMID: 32932797; PMCID: PMC7559813