Analysis of green consumer behaviour towards the intention to purchase upcycled fashion products

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ABSTRACT – REZUMAT

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In recent years, the emergence of online platforms specializing in upcycling fashion marketing has provided affordable markets in line with the changing expectations of environmentally conscious consumers. This research applies questionnaires to collect data on consumers' intentions to purchase upcycling fashion products and aims to identify consumers' green behaviour. The results showed that there is a growing awareness among all generations of respondents about the use of upcycled fashion products and revealed that social influence, attitude, perceived risk, environmental concern, and usefulness have a significant positive impact on consumer purchase intention towards these products. This research can help the upcycling fashion business in Romania figure out how green consumer behaviour can improve the flexibility of specialized online platforms so that marketing strategies can be made.

Keywords: circular economy, sustainability, textile waste, recycling, purchase behaviour

Analiza comportamentului ecologic al consumatorului față de intenția de a cumpăra produse de modă reciclate

În ultimii ani, apariția platformelor online specializate în marketingul produselor reciclate creativ în industria modei au oferit piețe accesibile, în conformitate cu așteptările în schimbare ale consumatorilor conștienți de mediu. Această cercetare aplică chestionare pentru a colecta date despre intențiile consumatorilor de a cumpăra produse de modă reciclate și are ca scop identificarea comportamentului ecologic al consumatorilor. Rezultatele au arătat că există o conștientizare tot mai mare în rândul tuturor generațiilor de respondenți cu privire la utilizarea produselor de modă reciclate și au relevat că influența socială, atitudinea, riscul perceput, preocuparea de mediu și utilitatea au un impact pozitiv semnificativ asupra intenției de cumpărare a consumatorilor față de aceste produse. Această cercetare poate ajuta afacerea de reciclare creativă din România să descopere modul în care comportamentul ecologic al consumatorilor poate îmbunătăți flexibilitatea platformelor online specializate, astfel încât să poată fi realizate strategii de marketing.

Cuvinte cheie: economie circulară, durabilitate, deșeuri textile, reciclare, comportament de cumpărare

INTRODUCTION

The textile industry is one of the most polluting [1–3]. Famous clothing stores launch a new collection of clothing items on the market almost every two weeks. Basically, it is the continuous growth of items that are produced and thrown away, becoming waste in a very short time. The best solution is recycling any remaining textile material. Also, through the recycling of textiles, the mixing of all categories of waste, by default, and any form of pollution that may result from that mixture is avoided [4].

In addition to the long time required for the degradation of most textiles, when disposed of, they emit greenhouse gases and pollute the soil and water with chemicals and dyes [2]. At the same time, incineration for energy recovery is a method of disposing of municipal waste, including textile waste, in industrial combustion plants. Under European law, incineration is not a form of recycling but only a form of energy recovery or controlled waste disposal [5]. Although it is preferable to the method of waste disposal by storage, according to studies [6–8], the amount of energy used for fibre production is significantly higher than that recovered. For these reasons, incineration should be the last method used for the management of textile waste, after reuse and recycling. In this regard, there are even initiatives to ban the incineration and storage of unused textile stocks.

A solution to these problems could be upcycling recycling, which is an increasingly popular practice that transforms one textile product at the end of its life into another [1, 3, 4]. This process begins at the design stage, has a positive effect on the entire life cycle, and allows several actors to interact. The main feature of upcycling is that new products will have the same quality or better value than the original ones. Upcycling is also a method for companies and designers to be more efficient with surplus materials including upholstery scraps or old textiles [4]. In other words, they produce creative and frequently one-of-a-kind products from waste, and the process involves giving used materials a new use without investing much in new resources. This concept is well defined

in the literature and, above all, very different from the better-known term recycling, which instead describes an industrial process of waste transformation [7–10]. Several authors [2, 4, 8] believe that research and innovation are needed to support the creation of a fully functional recycling sector for textiles while stimulating market demand for upcycling and recyclable fibres and yarns. Also, for more people to want to buy these products, companies in the field need to step up their social media campaigns to show how reused textiles might be better for your health than new textiles [11–15].

The motive to purchase upcycled fashion products is subjective, depending on whether it is in the person's best interests as an internal motivation (attitude toward upcycled fashion materials, environmental concern, usefulness) or is determined from the outside as an extrinsic motivation (social influence, perceived risk). In this context, social influence is defined as an individual's perception of people's behaviour that is important to them. Numerous prior research has also demonstrated that perceived risks have a negative effect on the behavioural intent and purchase behaviour of online consumers [3, 6, 11]. Users of online platforms specializing in upcycling fashion may face the perceived risk of using the app and purchasing services while leaking personal information. On the other hand, when customers develop a favourable opinion of upcycled fashion materials, they will create a desire to purchase these items considering their usefulness. Environmental concerns are often seen as major motivators for recycling, but consumer perception of how vital it is to conduct conscientious behaviour must also be investigated.

From the perspective of what has been presented, this research advances the following hypotheses:

H1: Social Influence has a significant impact on the intention to purchase upcycled fashion products.
H2: Attitude toward upcycled fashion materials has a significant impact on the intention to purchase upcycled fashion products.

H3: Perceived risk has a significant impact on the intention to purchase upcycled fashion products.
H4: Environmental concern has a significant impact on the intention to purchase upcycled fashion products.
H5: Usefulness has a significant impact on the intention to purchase upcycled fashion products.

The goal of this study is to find out what makes people want to buy upcycled fashion products from specialized online platforms. The results showed that social influence, attitude towards upcycled fashion materials, perceived risk, environmental concern, and usefulness have a significant positive impact on the consumer's intention to buy green compared to upcycled fashion products. Moreover, because social influence and attitude toward upcycled fashion materials have proven to have the greatest effect on buying intent, digital marketers need to focus on consumer perceptions when establishing promotional campaigns on online platforms specializing in upcycling. fashion. This research has the potential to improve existing analyses of the green consumer profile in Romania by providing actual evidence of the market's appetite for upcycled fashion products.

The rest of the paper is organized as follows: the research model is presented in the second section; the empirical results are described in the following sections, and the study's conclusions are presented in the last section.

RESEARCH METHODOLOGY

To ensure the validity of the research, the questions of this study are based on previous related literature that has been revised by experts and correctly altered in line with the context of this study [7, 12, 14]. Table 1 contains descriptions of the research variables and theoretical frameworks that were used in this study. An anonymous online questionnaire was distributed through social networks to 420 people from January 2022 to March 2022. Data collected were analysed using the structural equation model (SEM).

Table 1

DEFINITIONS OF THE CONCEPTS AND VARIABLES USED IN THE STUDY	
Concepts and Variables	**Definition**
Social Influence (SI)	The choice of the media is not based on its subjective qualities but on other social elements, including organizations, peer groups, posts, and social networks, that have an impact on how individuals perceive, experience, and behave when using the media.
Attitude toward upcycled fashion materials (AUF)	Individuals' intentions to purchase upcycled fashion products can be predicted, in part, by their attitudes.
Perceived risk (PR)	It occurs when consumers just cannot see the consequence of their purchase and are scared about undesirable outcomes.
Environmental concern (EC)	This refers to an individual's strong attitude toward ecosystem protection and environmental issues.
Usefulness (UF)	Possibilities of the subjective personal opinion that one will engage in given behaviour in the future.
Purchase intention (PI)	This is a person's willingness to actively act.

The respondent's level of agreement and disagreement on each item was described using a five-point Likert scale (1 = strongly disagree, 3 = uncertain, 5 = strongly disagree). To test the theoretical hypothesis, this study used Partial Least Squares (PLS). To eliminate the bias of the results, the snowball sampling method was used, which also allows equal chances to be given to all respondents who have the potential to be future customers of upcycling fashion products. The percentage of males and women in the surveyed population may be found to be fairly equal. The majority of participants were between the ages of 25 and 34 (40%) and 15 to 24 (34%). Approximately 10% of those polled were between the ages of 31 and 38, 8% were between the ages of 35 and 44, 6% were between the ages of 45 and 54, and 2% were between the ages of 55 and 70. Figure 1 illustrates the conceptual framework of the study.
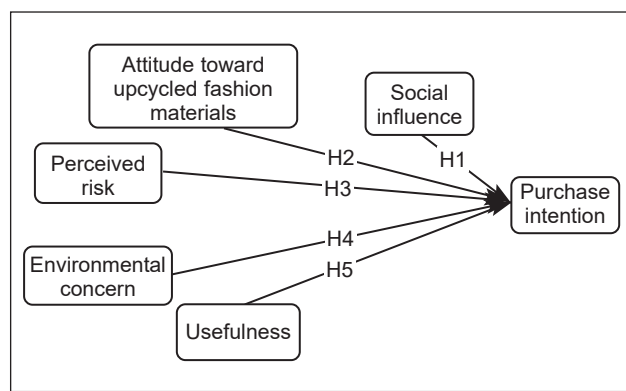

Fig. 1. Proposed research model

The reliability and validity of the measuring model were examined. In this study, the questionnaire's findings were examined using Cronbach's reliability of composition, and the validity analysis comprised assessments of convergence validity and discriminate validity. The convergent validity test was conducted using confirmatory factor analysis (CFA) and the average amount of variance extracted (AVE) in this study. The convergent validity was determined by comparing the AVE and the square of the correlation coefficient between the dimensions. The purpose of the structural model analysis was primarily to investigate the analytical outcomes of the routes between the assumptions. All of the AVE measures presented in table 2 exceeded 0.5, providing strong support for convergent validity.

RESULTS

Following the verification of the measurement model, the structural model shown in table 3 was analysed for its accuracy. Overall model fit results (x^2/df = 1.521, NFI = 0.962, NNFI = 0.966, CFI = 0.978, RMSEA = 0.042, SRMR = 0.05) suggested that the hypothesized model as well as the observed data have been well. The estimated structural coefficients were then used to assess the individual hypotheses. Figure 2 demonstrates that the model's predictors account for 68% (R^2 = 0.68) of the variance in purchase intention. Social influence is found to have a significant influence on purchase intention with the highest coefficient (β = 0.38, p < 0.001) that is subsequently followed by attitude toward upcycled fashion materials (β = 0.29, p < 0.001), environmental concern

Table 2

SUMMARY OF MEASUREMENT SCALES					
Variable	Constructs items	Mean	Factor loading	Cronbach's α	AVE
Social Influence (SI)	SI 1	3.75	0.74	0.95	0.58
	SI 2	3.79	0.75		
	SI 3	3.96	0.74		
Attitude toward upcycled fashion materials (AUF)	AUF 1	3.97	0.77	0.95	0.60
	AUF 2	3.70	0.74		
	AUF 3	3.84	0.77		
Perceived risk (PR)	PR 1	3.85	0.79	0.85	0.56
	PR 2	3.94	0.74		
	PR 3	3.87	0.74		
Environmental concern (EC)	EC 1	3.86	0.77	0.89	0.58
	EC 2	3.85	0.81		
	EC 3	3.94	0.75		
Usefulness (UF)	UF 1	3.78	0.74	0.86	0.55
	UF 2	3.73	0.74		
	UF 3	3.83	0.75		
Purchase intention (PI)	PI 1	3.81	0.74	0.94	0.55
	PI 2	3.39	0.74		
	PI 3	3.69	0.75		
	PI 4	3.78	0.76		

($\beta = 0.24$, $p < 0.001$), usefulness ($\beta = 0.22$, $p < 0.001$), and perceived risk ($\beta = 0.20$, $p < 0.01$). As a consequence, the findings suggested that the proposed model is acceptable.

Table 3

THE RESULTS OF STRUCTURAL MODEL PATH ESTIMATES

Hypothesized path		β	t -value	Testing results
H1	SI -> PI	0.38	2.87*	Supported
H2	AUF-> PI	0.29	2.24*	Supported
H3	PR -> PI	0.20	2.05*	Supported
H4	EC -> PI	0.24	2.40*	Supported
H5	UF -> PI	0.22	2.10*	Supported
Model fit indices				
NFI		0.962		
CFI		0.978		
RMSEA		0.042		
RMR and SRMR		0.05		

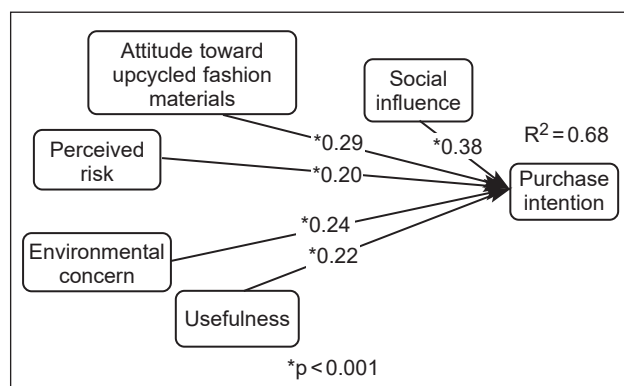Note: Significance of path coefficients: * p < 0.01.

Fig. 2. Results of structural model testing

Most of the hypotheses of the model are strongly supported, but an important conclusion of this study is that social influence plays an important role in the process of expectation formation, and also in the intention to purchase upcycled fashion products. So, online platforms specializing in upcycling fashion marketing can direct their promotional campaigns to people with environmental concerns by entailing usefulness as a hedge against future uncertainty.

CONCLUSIONS

To attract new consumers for upcycling fashion items, specialized online platforms must examine from the users' perspective and understand why users utilize the virtual community and what type of strategy should be implemented to increase the intention to purchase these products [16–18]. Furthermore, this study examined psychological and behavioural elements at the individual level while analysing the factors influencing customer behaviour toward upcycling fashion products. Since upcycling fashion inclination has stabilized, customers' consumption patterns have developed.

From the perspective of potential theoretical implications, this research adds to the body of knowledge and literature on sustainable and upcycled fashion. Because of the issues surrounding textile waste, many fashion firms are battling to attract and keep clients with sustainable fashion items, such as upcycling fashion products. Overcoming these preconceptions is a significant challenge for today's upcycling fashion marketers.

Several suggestions for managers and marketers are provided in light of the research's practical consequences. Thus, these results can act as a reference point for knowing the priorities or expectations of the Romanian customer for upcycled fashion products. For instance, the study's results show that behavioural factors are also linked to making financial decisions. This means that the current model could be improved by adding more features related to how people see financial risk.

Converting non-consumers of sustainable fashion products, on the other hand, can be challenging. On top of that, as mentioned previously, the phenomena of fashion are rather complicated. The current study evaluated only behavioural purchase intent, as opposed to actual consumption; it was conducted in an online format, and its participants were limited in terms of their geographic location. In future studies, we will use other individual characteristic variables, apart from personal values, which could shape the relationship with the consumption of upcycling fashion products.

In conclusion, it is important to take measures to prevent environmental pollution through the proper recycling of textiles. It is vital to remember that any company that generates waste, in this case, some textiles, are obliged and responsible to carry out their management. People's feelings about upcycled fashion materials are seen as the most important factor in determining whether or not they will buy these products [19, 20]. Online community platforms that focus on upcycled fashion can also do customer segmentation from the customer's point of view to better meet customer demand.

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