Rented, second hand or new? Pro-circular clothing behaviours in Lithuania

R. Dagiliūtė[1*], U. Zarankaitė[1], I. Kniuipytė[2]
[1]Department of Environmental Sciences, University Vytautas Magnus University, Kaunas, 44248, Lithuania
[2] Laboratory of Heat Equipment Research and Testing, Lithuanian Energy Institute, Breslaujos 3, LT44404 Kaunas, Lithuania
*renata.dagiliute@vdu.lt

Introduction. Textile industry is one of the most polluting industries (ETC/WMGE, 2019), causing water pollution (Khan et al 2023). Soil, air pollution together with biodiversity loss and climate change issues are also attributed to the textile and clothing industry. Another aspect is dependence on resources and waste generation. Textile industry is the third largest user of freshwater globally (Haque et al 2021) and one of the biggest consumers of other resources (ETC/WMGE, 2019). Furthermore, more than two thirds of the textile end up in landfills and only some 15% is recycled (Shirvanimoghaddam et al 2020). Hence, sustainability and circular economy principles are those to be addressed in the textile industries. Consumers are one of the main drivers by increasing demand for eco-friendly goods and making pressure for governments (Jia et al 2020). In addition, during the use phase of textile products (clothing), particularly thru shared, longer use, reuse and proper textile waste sorting they can contribute to the overall circularity (ETC/WMGE, 2019). Therefore, this study aims to analyse attitudes and behaviour regarding purchase and handling of clothing, as well as socio-demographic factors behind in Lithuanian case.

Methods. Study is based on convenient survey, carried out in January-February 2023. Based on the literature review, questionnaire was prepared by the authors. It covers questions on attitudes towards textile industry, factors important when purchasing clothing, behaviour regarding purchase and handling clothing during use and afterwards. Potential respondents were approached via emails and social media. In total 210 answers were received. Majority of the respondents (77.5%) is women, with higher education (59.3%), up to 29 years old (55.5%). Study is mainly based on descriptive statistics. Frequency of buying clothes, renting clothes on special occasions, exchange of clothing, and buying second hand are analyzed. To reveal the influence of sociodemographic variables on analysed behaviours regression analysis is applied.

Results. Study reveals that most often respondents purchase clothes with the frequency of once per 3 months (40.7%). When purchasing clothes, the most significant factor remains to be the price (Mean 4.32, SD 0.831) and composition of fabrics (Mean 3.9, SD 1.056), the least important is ecolabel (Mean 2.8, SD 1.069) and country of origin (Mean 2.8, SD 1.216) (Fig. 1).

Regarding pro-circular behaviours, only 10.5% always or often rent clothes for special occasions and only some 14.4% always or often borrow cloths for such occasions. Some 56.5% never or seldom participate in the events for exchanging clothes. 32% always or most often indicate buying only new clothes. Though relatively small share of respondents always buys only new clothes (9.1%), in general desirable behaviours from the perspective of circularity are performed rather seldom (Table 1). Positively should be considered the fact, that second hand clothes are always or often bought by 35.4% of the respondents.

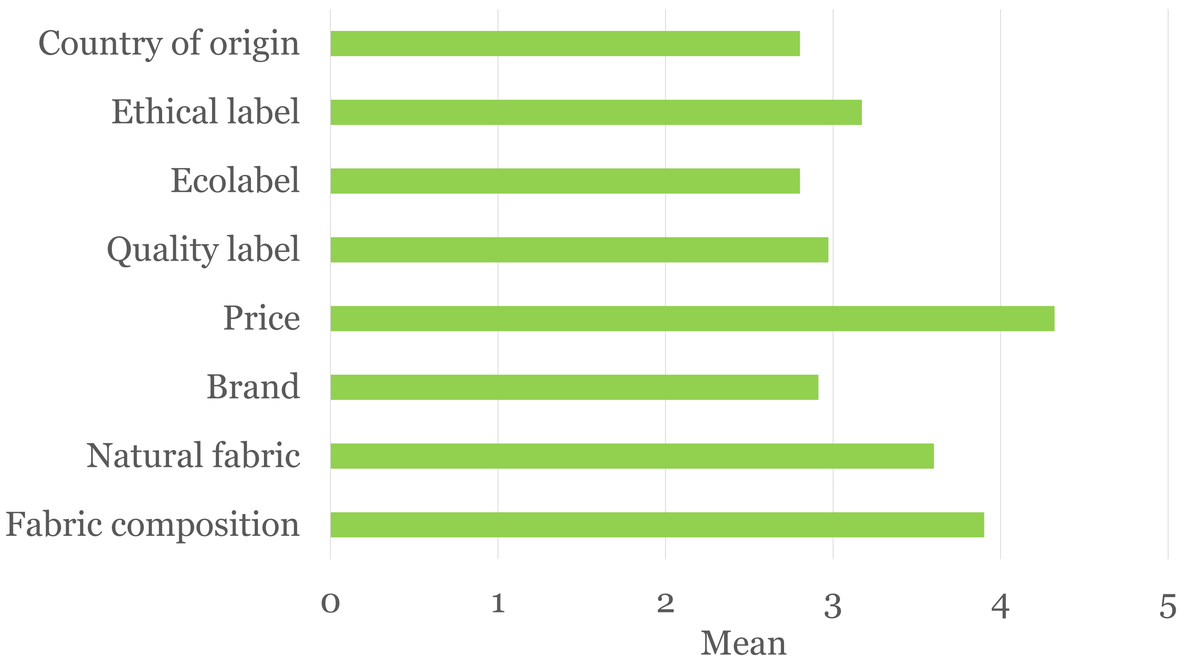


Fig. 1. Important factor whole purchasing/ clothes

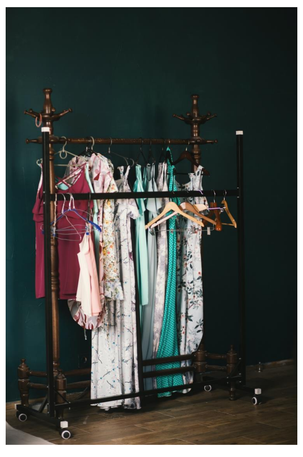
Table 1. Characteristics of pro-circular behaviours

Behaviour	Mean	SD
Renting clothes for special occasions	1.91	1.103
Borrowing clothes for special occasions	2.2	1.188
Exchanging clothes	2.97	1.128
Buying second hand clothes	3.07	0.914

Regression analysis reveals that more often women (β=0.52, p<0.05) and younger respondents (β=-0.118, p<0.1) rent clothes for special occasions. Borrowing is also more often characteristic for younger respondents (β=-0.267, p<0.001) and women (β=0.68, p<0.001). However, exchanging clothes is determined only by gender, i.e., in general women more often take part in clothes exchange events than men. No significant sociodemographic characteristics are determined for buying second-hand clothes.

Table 2. Regression results for all four pro-circular clothing behaviours taken (bold values p<0.05, *italics* p<0.1)

Factor	Renting clothes for special occasions		Borrowing clothes for special occasions		Exchanging clothes		Buying second hand clothes	
	ß	p	ß	p	ß	p	ß	p
Gender [woman]	**0.52**	**0.004**	**0.68**	**<0.001**	**0.751**	**<0.001**	0.178	0.247
Age	*-0.118*	*0.077*	**-0.267**	**<0.001**	-0.075	0.314	-0.054	0.334
Incomes per household	0.68	0.129	0.033	0.488	0.021	0.67	0.034	0.372
Children under 14	0.151	0.472	0.185	0.4	0.038	0.872	0.083	0.64
Household size	0.032	0.619	0.048	0.478	0.049	0.502	0.027	0.621
Omnibus test		**<0.05**		**<0.05**		**<0.05**		>0.05



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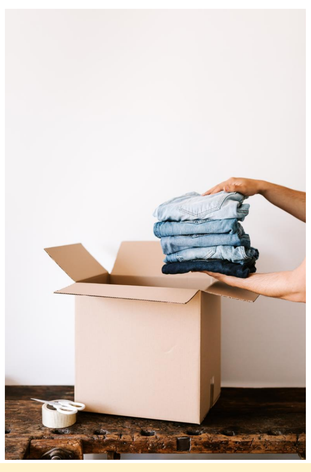

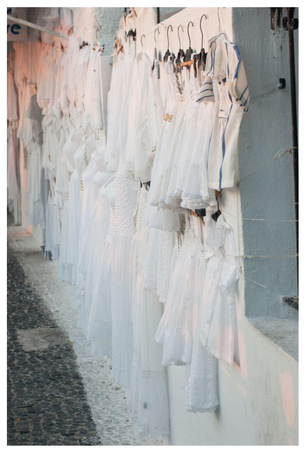

Conclusions. Results indicate that in general the level of pro-circular behaviours regarding clothing is low. The main factor while purchasing apparel is price. Preliminary results of regression analysis show that gender and age are the main sociodemographic factors behind pro-circular behaviour. However, potentially other factors might be also of importance, for e.g., price of the product or environmental awareness, and should be included into analysis.