One Size Does Not Fit All: Consumer Attitudes towards Circular Business Models in Fashion.

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Abstract

This research report outlines the purpose, scope and methodology of a recently conducted consumer survey that explores sustainable clothing consumption and the attitude towards circular business models used in fashion. It also presents a sample of the descriptive findings from the survey. The consumer survey was conducted in Flanders, with approximately 1700 respondents. The purpose was to explore differences in the end-consumers' perception and acceptance of sustainable fashion and circular business models, across lifestyle and psycho-demographic factors. The collected data will be used as foundation for upcoming deliverables relating to the perception of and willingness to purchase sustainable clothing: consumer segmentation across lifestyle, acceptance of new business models and B2C communication recommendations. The results in this report relate specifically to consumer general clothing consumption patterns, sustainable clothing consumption and the acceptance of circular business models.

One of the main results of the descriptive analysis on generational differences is to be found in volume, current sustainable behaviour, the importance of price as main driver and different attitudes towards circular business models. Overall, most respondents confirm they are of course concerned about climate change (86%), especially women and higher educated. GenZ (age 25 or younger) is the most pessimistic in their believe of making an individual difference in the global environmental issues. This pessimism is reflected in the lack of concern for the environment while shopping (22%) while this percentage increases by age. However, GenZ indicates for a large percentage they have the intention to change their behaviour in the (near) future. With the coming of age, lifestyle values become slightly more 'idealistic' (towards 'conscious consumerism') than 'materialistic'. When asked who should take responsibility to evolve towards sustainable clothing consumption and in what degree, half of responsibility should be borne by companies, 30% should be taken by the government and only 20% states is on the consumer. In relation to the introduction of circular business models results show that 36% is interested in buying second-handed clothes from resellers and 35% is willing to use a take-back service. The least appealing to consumers is a clothing library (only 9% is willing to use it), however renting for a special occasion shows a larger support base.

This survey was conducted as a first steppingstone in a larger study aiming to provide insights into the (potential) target market of circular fashion in Flanders, thereby enabling organisations to innovate more successfully. By focussing on market segmentation, this will enable local organizations to finetune their go-to-market strategy, aligned with product, process and customer.

Keywords: consumer perception, new business models, sustainable fashion, circular economy

Introduction

The clothing industry is currently one of the world's most polluting industries, heavily impacting the environment through its immense use of water and chemicals during production (e.g., for growing cotton or dying textiles), as well as ecosystem pollution, and textile waste generation (Gwozdz, Nielsen, & Müller, 2017). Clothing sales have nearly doubled globally from 2000 to 2015 (Ellen McArthur Foundation, 2017; Euromonitor International, 2016) – in great part due to the rise of fast fashion, which has increased the number of yearly collections, lowered the price of clothing and shortened the use phase. Today, on annual basis, the average European citizen consumes 26 kilos of textiles and generates 11,3 kilos of textile waste (Vito, 2021). This explosive growth of sales and disposal is increasingly causing environmental problems that are linked with the fashion industry.

Due to this increasing industrial impact on our society and environment, the social and ecological pressure to innovate responsibly in the fashion industry rises. Hence, national and international policy[1] increases the pressure and aims to facilitate a fast transition towards a new economy via sustainable innovations. The circular economy offers opportunities that can help the fashion industry to respond to these new demands, while offering new growth opportunities. To achieve this, the fashion industry will need a fundamental redesign: shifting from a take-make-waste model towards a reuse-based model. Unlocking this potential would require the industry to pursue the following actions: create new business models that increase clothing reuse, use inputs that are safe and renewable, and develop solutions so used clothes are turned into new products. (Ellen McArthur Foundation, 2021)

However, although a substantial proportion of the responsibility to move towards a sustainable clothing consumption lies with the clothing industry, a part of the responsibility needs to be borne by consumers, whose actions can be seen as a crucial factor in closing the loop, since they make a difference in each consumption stage, from acquisition to disposition. The successful implementation of innovations addressing the environmental problems associated with clothing consumption is therefore multifaceted and requires aligned (re-) actions by many actors (e.g. consumers, private organisations and governments.) When innovations are not aligned with consumers' responses (f.e. willingness to pay, a willingness to take part, showing the required circular behaviour to make a business model successful), circular innovations tend to end up failing or are often modified back as linear business models (DG for Justice and Consumers, 2018).

Therefore, to initiate a successful sustainable transition, organisations need to obtain insights into their customer segments. Consumers' unique wants and needs vary widely and will react differently to diverse sustainable products, services and communication. Market segmentation based on circular consumer behaviour, provides opportunities for focused business innovation. Providing insights into the (potential) target market of circular fashion enables organisations to innovate more successfully, through finetuning their go-to-market strategy, aligned with product, process and customer.

Despite international reports researching this circular behaviour in numerous countries, national and local studies are lacking. Multidisciplinary research into the circular consumer behaviour in Flanders is necessary to support local actions for a competitive circular fashion industry.

Purpose and scope

The purpose of the present study is to assess behaviour, intentions, attitudes and knowledge in regard to 'sustainable clothing consumption and circular business models' of the Flemish consumer.

[1] The circular economy has become a priority policy topic in Europe (EC, 2015, 2020) and is a key objective of the European Green Deal. A EU strategy for textiles is being developed.

The 4 sub-questions guiding this research:

- What is the current **behaviour** with regard to a sustainable lifestyle?
- What are the future **intentions** for improving one's lifestyle? Is there a willingness to buy sustainable clothes or an intention to make use of circular business models (like buying second-hand, swapping, repair, renting or borrowing from libraries)?
- What is the current **attitude** towards circular business models? What are barriers and drivers per business model?
- What is the degree of **knowledge** and understanding of the environmental impact of the clothing industry and of one's own purchasing behaviour? What is the sense of responsibility per segment?

Material and methods

Research methodology

To compile the questionnaire, an extensive literature study was performed to map the different elements that influence consumer acceptance and adoption of circular consumption behaviours, with focus on clothing purchases. Hence, all items and answer categories were developed based on (1) this literature study, (2) previous survey experience and (3) the results of a preliminary exploratory phase (November 2020), in which we conducted a pilot test to validate factors influencing clothing purchasing behaviour ('Production-related', 'Trend-related', 'Pragmatic-related' and 'Price/Convenience-related' factors). An Exploratory Factor Analysis (EFA) in SPSS was used for this purpose and resulted in the deletion of some Likert scale statements in the final edition of the questionnaire.

For this survey, we used constructs and variables from Camacho-Otero et al. (2019) on factors and conditions influencing acceptance and adoption of circular offerings, Soyer et al. (2019) on consumer profiles and environmental purchasing criteria, Azjen (2011) on the theory of planned behaviour, and the impulsive purchasing behaviour of fast fashion, Vehmas et al. (2018) on consumer attitudes and communication in circular fashion, Antikainen et al. (2015) on consumer acceptance of novel services, Gwozdz et al. (2017) on consumer segments and their behavioural patterns and McNeil & Moore on the importance of clothing choice (2015).

In addition to meeting the basic need for protection against weather variations, clothing functions as a means of personal communication by which individuals express themselves through their clothing choices (Gwozdz, Nielsen, & Müller, 2017). Based upon the insights gathered by McNeil and Moore (2015), we composed Likert scale statements to measure the importance of clothes and shopping. This scale was tested for reliability in the pilot test (six items; Chronbach's alpha: .843) and was recalculated as a single average score in this analysis.

To answer the main research question, a quantitative research approach was used to collect data with an online survey, send to a wide sample of Flemish respondents. A descriptive and correlational research analysis was conducted in preparation of a two-step cluster analysis to distinguish consumer profiles for the Flemish clothing market.

In this paper the emphasis is on the descriptive and correlational analysis, according to generation. In a follow-up paper we will describe the methodology and results of the cluster analysis and draw conclusions for each of the segments of consumers.

Questionnaire and online survey

Data was collected between November 2020 and April 2021, by means of a self-administered online questionnaire designed with Qualtrics® (Survey platform, sd). The self-administered questionnaire consists of nine topics: (1) demographics, psychographics (values and lifestyle) and (2) media usage, (3) current consumption behaviour in general, (4) buying behaviour in the field of clothing, (5) attitudes towards sustainable clothing, (6) knowledge on environmental impact of clothing, (7) drivers and barriers for buying sustainable clothing, (8) future intentions, and (9) knowledge and attitudes towards circular business models (like renting, repairing, re-selling, returning and re-buying clothes). A mix of question types was used, ranging from classical Likert scale questions to ranking questions.

Sampling

The study focusses on Flemish consumers (aged 15-87). A research panel was used to contact participants to partake in the online questionnaire. The authors tapped into their own network and used social media to reach potential participants. To stimulate participants in partaking in the online survey, gift cards were raffled among participants.

Analysis

The quantitative data was analysed with SPSS® (version 24). After a general analysis by means of descriptive statistics (to get an overall view on the sampling data distributions), a correlation analysis was done to refine the overall view and have a break-out report per generation. The significant threshold was set at .05 and indicated with '*' in tables. In cases were a .001 is applicable, '**' is used in tables. In a subsequent phase, a cluster analysis was performed that resulted in 4 consumer profiles (not discussed in this paper).

Results

Sample composition

Table 1 - Summary of statistics for socio-demographic profile

		Count	Column N %	Missing
Gender	Male	427	24,6%	
	Female	1293	74,4%	
	I prefer not to answer	12	0,7%	
	X	6	0,3%	
	Total	1738		21
Responsible for Purchases (RFP)	RFP	918	76,0%	
	Not RFP	290	24,0%	
	Total	1208		533
Netto monthly (familiy) income	< 1500 €	81	5,1%	
	1501 € - 2500 €	288	18,2%	
	2501 € - 3500 €	285	18,0%	
	3501 € - 4500 €	286	18,1%	
	4501 - 5500 €	166	10,5%	
	> 5500 €	138	8,7%	
	No answer	338	21,4%	
	Total	1582		497
Household type	Single	534	30,9%	
	Single with kids	81	4,7%	
	Couple without kids	494	28,6%	
	Couple with kids	536	31,0%	
	Other	20	1,2%	
	Living with (grand)parent / student	65	3,8%	
	Total	1730		96
Age	25 jaar of jonger (GenZ)	525	31,3%	
	26-44 (Millennials)	361	21,5%	
	45-56 (GenX)	350	20,8%	
	57-74 (Baby Boomers)	397	23,6%	
	74+ (Silent Gen)	46	2,7%	
	Total	1679		108
Education	Lower educated	631	40,2%	
	Higher educated	937	59,8%	
	Total	1568		173
Profession / situation	Part-time employed	186	11,8%	
	Employed full-time	442	28,2%	
	Self-employed	112	7,1%	
	Unemployed	100	6,4%	
	Pupil or student	433	27,6%	
	Retired	297	18,9%	
	Total	1570		171

1738 respondents returned the questionnaire. Considering the focus of the survey on people responsible for purchases (RFP) within their household, and considering the topic ('buying clothes), the sample contains proportionally more women. The average age is 42 (SD=18). If only RFP are retained (n=890), the average age is 49 (SD=14,5) (Table 1).

Current behaviour

GenZ (age 25 or younger) is the most pessimistic in their believe of making an individual difference in the global environmental issues: 13% is extremely negative. Only 9 % of the Millennials (age 26-44) is extremely negative, but 23% is extremely positive (biggest portion in comparison to other generations).

This pessimism is reflected in the lack of concern for the environment while shopping: only 22% of GenZ is always or most of the time concerned, while this percentage increases to 44% of the Millennials, 39% of GenX (age 45-56) and 50% of the Baby Boomers (age 57-74).

Overall, most respondents confirm they are of course concerned about climate change (86%), including especially women and higher educated.

Based upon a 6-point scale, ranging from 'no, I do not care much' [about a sustainable lifestyle], to 'yes I'm quite involved with it', the respondents could be divided into two groups: 43% is rather not occupied with a sustainable lifestyle at the moment (indicated as NSL), while 57% is (indicated as SL). In the latter group we find more Baby Boomers (age 56+), higher educated, women and self-employed persons. 16% of GenZ wants to change this in the future [and adhere to a more sustainable lifestyle].

Respondents had to describe their buying behaviour in relation to clothes: (1) I'd rather spend my money on something else (because I'm not interested in clothes), (2) I buy mainly what I need, (3) I sometime buy clothes that I don't need but just like, (4) My wardrobe is full of impulse purchases. 54% of the respondents can be considered as 'necessity buyers' (NB) and 46% are 'impulsive buyers' (IB). Within GenZ 63% belongs to the IB category and within the Baby Boom generation 33% belongs to this category.

The main reason why the NSL group is not occupied with a sustainable lifestyle (at the moment) is 'price' (45%) or the notion of greenwashing (34%). For 18% of the NSL group the information of sustainable products is too complex or is not clear. These barriers differ between generations: GenZ and Millennials (who belong to the NSL group) are concerned about 'price' (49%), 'time' (36-37%) [leading a sustainable lifestyle is time-consuming] and GenZ even states 'it's not an issue in their world' (34%).

On average €138 is spend on clothes on a monthly basis. This budget differs according to generation, occupation, level of education, gender and type of household (Table 2).

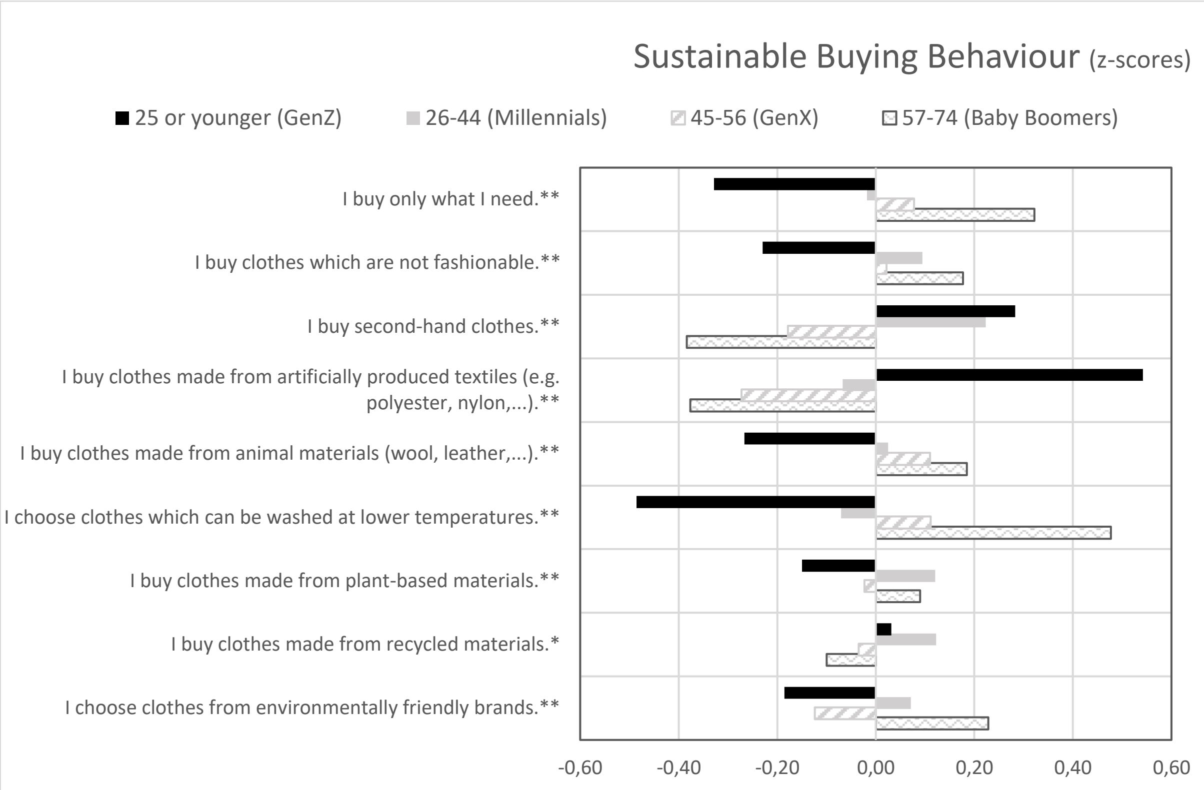
Table 2 – Average monthly budget spent on clothing (including kids and partner, if applicable)

		Mean (€/month)	N	Std. Deviation	Std. Error of Mean
GENERATION	GenZ (<26)	€ 87	61	63,61	8,14
	Millennials (26-44)	€ 119	235	100,63	6,56
	GenX (45-56)	€ 181	214	154,85	10,59
	Baby Boomers (57-74)	€ 133	306	129,34	7,39
	Total	€ 138	816	128,54	4,50
PROFESSION / SITUATION	Part-time employed	€ 146	115	118,70	11,07
	Employed full-time	€ 146	290	136,05	7,99
	Self-employed	€ 172	85	165,35	17,93
	Unemployed	€ 92	60	69,35	8,95
	Pupil or student	€ 91	37	64,96	10,68
	Retired	€ 119	227	111,69	7,41
	Total	€ 135	814	126,03	4,42
LEVEL OF EDUCATION	Lower educated	€ 117	199	115,63	8,20
	Higher educated	€ 140	616	128,57	5,18
	Total	€ 135	815	125,86	4,41
GENDER	Male	€ 123	251	116,19	7,33
	Female	€ 143	624	130,46	5,22
	Total	€ 137	875	126,78	4,29
HOUSEHOLD TYPE	Single	€ 97	195	92,70	6,64
	Single with kids	€ 142	49	111,58	15,94
	Couple without kids	€ 129	307	117,39	6,70
	Couple with kids	€ 173	310	147,45	8,37
	Total	€ 138	861	127,29	4,34

Our respondents reported to buy mostly lower middle segment clothing (e.g.. Zara) (90%), or 'budget clothes' (e.g. H&M, Bristol, Zeeman, Primark) (59%). These fast fashion purchases occur more frequently among GenZ and the Millennials.

In regard to buying sustainable clothes or materials (Figure 1), z-scores show the significant differences between the generations. A majority of GenZ (63%) and a large segment of the Millennials (42%) does not take into account wash labels in order to consciously select clothing items that can be washed at low temperatures, while a majority of Baby Boomers (58%) do consider this feature when buying a clothing item. Contrary to what GenZ and the Millennials previously indicated in relation to buying clothes in the known fast fashion chains, 52% of GenZ and 64% of the Millennials say they are not per se driven by what is ‘in fashion’. As far as textile materials are concerned, we see differences according to generation: 49% of the Baby Boomers chooses a sustainable brand at least half of the times when shopping for clothes; GenZ: 32%, Millennials: 41%, GenX: 32%. Plant-based textiles are starting to find their way into the market, but GenZ is least inclined (18%) to buy it; 25% of the Baby Boomers and 25% of the Millennials buy it regularly. 66% of GenZ mainly buys man-made textiles (polyester, nylon), while this segment drops to 28% among the Baby Boomers. Recycled materials are only consciously bought by a minority (ranging from 21%-22% of the younger respondents, to 14%-16% of GenX and older respondents). Buying second-hand clothing consciously and regularly can be linked more to GenZ (28%), than to older generations. Only 6,4% of the Baby Boomers buys second-handed clothes regularly. 74% of this segment never buys second-handed clothes.

Figure 1 - Sustainable Buying Behaviour



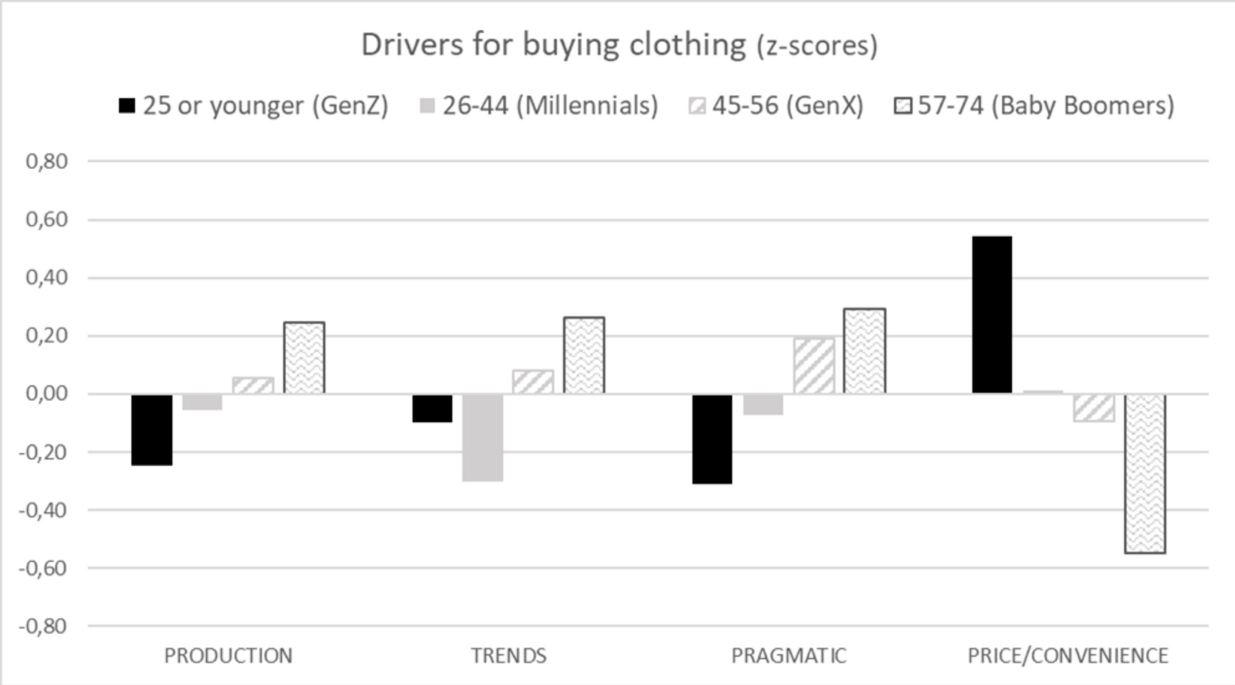
Among generations no significant differences were found in regard to the end-of-life actions of clothes. A majority of respondents (68%-84%) dumps slightly damaged items in a clothes bin (to be used as a second-handed item by a charity organization). 22% of GenZ dumps slightly damaged clothes in a waste bin, while only 8% of the Baby Boomers dumps them in a waste bin.

Undamaged but unworn clothing is rarely dumped in a waste bin (1%-5%). In most cases, those items are taken to a clothes bin. 44% of GenZ puts them up for sale. With the increase of age, we see a decrease of this percentage. Only 6% of the Baby Boomers puts them up for sale.

Drivers

14 statements where used to measure drivers when buying clothes. The highest overall mean scores are found for 'wearing comfort [of the clothing item]', 'quality' and 'price'. The most notable low average score is for 'trend of the moment'. Apparently, when self-reporting on drivers for one’s clothing behaviour, most people say 'trends' are 'not that important', although many of them buy clothes in fast fashion chains, where fast fashion products tend to have a short lifespan because of the product's symbolic value namely, being outdated by newer trends (Gwozdz, Nielsen, & Müller, 2017). Other less important drivers are 'brand awareness', 'owning unique garments', 'Belgian origin [of a clothing item]'/'country of origin'. The z-scores show a significant difference according to generation, where for most drivers (all except 'quality') there is a clear distinction between GenZ and the Millennials versus GenX and the Baby Boomers. GenZ does like unique garments, admits trends are rather important and adheres importance on the ability to order and send back online. Older respondents (GenX and Baby Boomers) adhere more importance on 'wearing comfort', 'textile material', 'country of origin' and 'brand awareness'. This segment prefers new garments, while the younger generations are open to second-hand clothing (because of the uniqueness). Based on a factor analysis, the 14 statements were reduced to 4 stable factors: (1) Production-related factors, (2) Trend-related factors, (3) Pragmatic factors and (4) Price/Convenience related factors (figure 2).

Figure 2 – Drivers for buying clothes (z-scores)



Barriers to buy sustainable clothing

Barriers towards sustainable clothing are related to 'information' (it's not clear what a sustainable garment is and what not) (56%), 'price' (it costs more) (48%) and 'time' (it takes too much time to figure out what is a sustainable garment) (43%). A smaller portion shows a lack of trust towards sustainability claims (24%), or does not like the range of choices (33%). 'Price' decreases as a barrier when age increases: 38% of GenZ chooses 'price' as most important barrier, while only 18% of the Baby Boomers does. GenZ does not want to spend much time figuring out what is sustainable and what not. Baby Boomers admit they lack clear information on what is a sustainable garment and what not (45%), but they don't put up the argument of 'not wanting to spend much time in figuring out'.

The most important reason to buy sustainable clothing - regardless of generation to which one belongs - is because of the fair working conditions (no sweatshops conditions) (37%), the reduced harm to the environment (34%), the increased lifespan of the garment (19%) or the believe in health benefits [because of less chemicals used in the production process] (9%).

There's little resistance towards specific organic materials, recycled materials or reused textiles: at least 73% is open to try these.

47% of the total sample buys second-handed clothing. The drivers for consumers of second-handed clothes (n=756), are because it's economical (66%), it makes you happy (for doing the right thing) (52%), or because of no desire to buy a trendy garment (48%). 39% buys designer brands at a cheaper price. While second-handed clothing is on the rise, among other things because of retro trends, only 19% confirms the more positive image of second-handed clothing in recent years.

53% of the total sample doesn’t buy second-handed clothing. 68% of this group prefers new clothes. 48% says second-handed clothes are not hygienic. 37% does not want to spend too much time searching for the right garment. 25% has issues with the smell of second-handed clothes. Only a minority confirms second-handed clothes has a bad image (9%).

Only a minority (9%) shows a willingness to use a clothing library. The drivers for doing so are related to helping diminish waste and having more variety in one's wardrobe. Significantly more respondents (28%) are willing to rent clothes for a special occasion.

Ownership of clothes is the most common reason for the unwillingness towards renting or leasing (61%). A second barrier is related to the perception that renting and leasing is 'a hassle' (43%). With 6 statements we measured attitude and importance of validated ecolabels. These statements were reduced to one average score that represents 'importance of ecolabels' [on buying behaviour] (6 statements, Chronbach's alpha: .853). Millennials show the largest trust and believe in ecolabels, in comparison to the other generations.

Future intentions

Respondents were asked to score on a scale from 1 (not sustainable) to 10 (very sustainable) successively their current lifestyle and their future lifestyle intentions. GenZ plans to make the biggest leap forward, from 5,18 (avg.) to 7,1 (avg.) in the future. The disparity between current and future lifestyle scores declines with each generations: Baby Boomers hardly increase their average score (from 6,4 to 6,7).

77% of the general sample is willing to buy sustainable clothing, if their favourite brand would offer. Only 4% shows no willingness.

76% of the willing respondents to pay a surcharge if needed for a sustainable clothing item, with a maximum of 20% of the normal price (for a non-sustainable clothing item).

Degree of knowledge and sense of responsibility

The majority of the respondents associates ‘sustainable clothing' mainly with 'produced in fair labour circumstances' (71%), 'low environmental impact at the production stage' (62%) and 'high quality clothes' (42%). However, GenZ associates sustainable clothing with 'made of recycled materials' (top 3) instead of 'high quality clothes'.

51% of the Baby Boomers consider themselves 'somewhat' informed on the environmental impact of the clothing industry, whereas Millennials (34%) think they are very well aware of the problem. But 1 in 3 Millennials is poorly informed. 36% of GenZ considers themselves poorly informed, while 22% says to be well aware (p=.000).

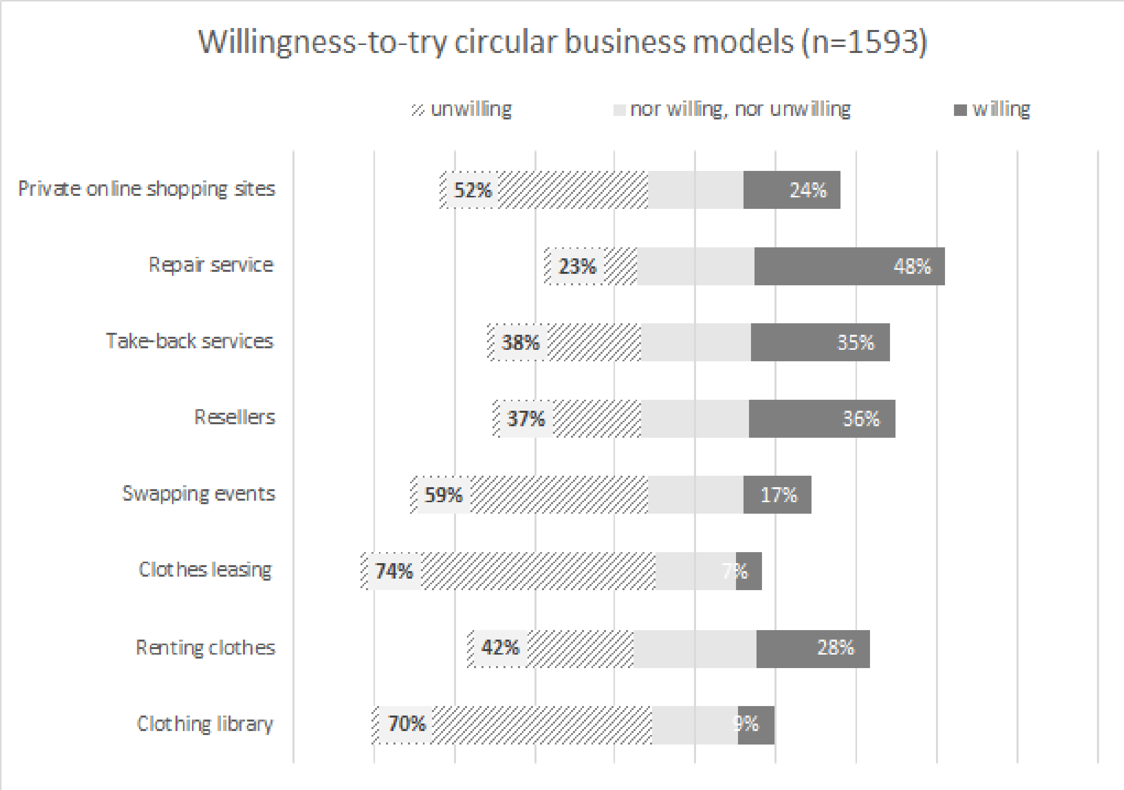
When asked who should take responsibility to evolve towards sustainable clothing consumption and in what degree, half of responsibility should be borne by companies, 30% should be taken by the government and 20% should be on the consumer. This is how all generations see it, but GenX and the Baby Boomers put less responsibility on governments.

Circular business models are gradually introduced into the market. The least-known circular clothing business models are leasing (18% is aware that it's a possibility) and borrowing clothes in a library (21%). 30% is familiar with resellers and 36% has heard of a take-back service. A majority (78%) knows renting services for clothes exists. 51% is aware of online private buying sites. 47% is aware of the existence of a repair service in a shop. GenZ has an overall good knowledge of repair services, take-back services, resellers and online private sites, in comparison to Baby Boomers.

Attitudes towards circular business models

Repair services have the largest potential market, based upon the proportion of respondents that is willing to use this service (48%) (figure 3). 36% is interested in buying second-handed clothes from resellers and 35% is willing to use a take-back service. The least appealing to consumers is a clothing library (only 9% is willing to use it).

Figure 3 – Willingness-to-try circular business models



The reason for this unwillingness with regard to renting or clothes leasing is the desire to own clothes (61%). According to 43% it seems like a cumbersome process. 1 out of 3 (33%) considers it to be unhygienic. The biggest obstacle for GenZ is ‘not owning clothes’ (75%), while the most mentioned barrier for the Millennials is 'the hassle' (60%). Only a small portion (between 9% and 16%) does not acknowledge possible advantages of renting or leasing, because of the small price difference with new clothes.

Impact of the corona crisis

While it was certainly not a research goal to map the impact of the lockdown(s) on buying behaviour, we did include a question in relation to the corona crisis. 79% does think the crisis had an impact on our collective buying behaviour. The remarks that followed this general question, can be summarized like this: The lockdowns and corona crisis have led to more online shopping and more returning of clothing, less buying of clothing in general, less need to buy formal (business/party) garments and more need to buy home wear, more conscious buying of clothes, less fun shopping and less budget to buy clothing.

Conclusion and discussion

With this study we assessed the current state of consumption behaviour, intentions, knowledge and attitudes towards sustainable clothing and circular business models in Flanders.

GenZ (age <25)

GenZ is rather pessimistic in their believe of making an individual difference, but they see themselves living a more sustainable lifestyle in the future. Their current lifestyle values are materialistic oriented. While shopping, their concern for a negative environmental impact might be lacking, but they want to change that someday. Clothing is a determining factor in their self-image: almost every GenZ girl is interested in clothing, a majority likes shopping, likes buying clothes and uses clothing to show themselves to the outside world.

GenZ males admit their general consumer behaviour is rather not sustainable, although they only buy clothes for necessity reasons, while GenZ females tend to buy more impulsively. GenZ buys fast fashion, both online (where they expect to easily return a purchase) as in the known fashion outlet stores. Their choice of clothing is most likely driven by price-related factors. They are not so much concerned with comfort, quality or origin of the garment. They are not adverse to second-hand clothing, although a small segment within GenZ buys them. They are quite familiar with the concept of 'resellers' and are also open-minded towards take-back services and repair services. Leasing and lending clothes are a bridge too far.

There seems to be some contradiction between their opinion and their behaviour: 1 in 3 GenZ respondents who claim never to buy fashion-related garments, did confirm that trends are important for them and that they avoid buying last year's fashion.

When they need to dispose of undamaged garments, they tend to sell them online, more than older consumers.

'Sustainable clothing' is mainly associated with 'low-impact production', 'made in fair conditions' and 'made of recycled materials'. The degree of knowledge on the subject varies greatly within GenZ. Barriers towards sustainable clothing are always price-related, but not so much information- or trust-related. They just do not want to spend too much time looking for 'what is a sustainable garment and what not', which fits in of course with their fast fashion preferences.

Millennials (age 26-44)

Millennials have a slightly more optimistic view on a positive outcome of their own actions, and at the same they time show the most concern towards climate change. This is reflected in their daily actions: more than 60% is a sustainable consumer in their daily life. Their lifestyle values are more post-materialistic oriented ('conscious consumerism'). Although they score themselves a modest 5.85 out of 10 for their current sustainable behaviour, they want to make a leap forward in the future (7.17). Specifically towards buying clothing, 54% sticks to necessity clothing purchases. Millennials adhere a substantial interest in buying clothing for their self-image, but slightly less than GenZ does. Millennial men show a lower importance score than Millennial women.

A majority buys fast fashion, but 1 in 3 Millennials does not buy trend-related items. 1 in 5 prefers sustainable brands. On average Millennials spend €119/month on clothing, with a significantly wider range amongst women (€108 - €230), and a higher average for Millennials with kids.

Millennials' purchase behaviour is not very driven by production-related factors (like environmental impact, fair conditions, origin) nor by trend-related drivers. In some aspects, their drivers are similar to GenZ, but not as outspoken. Price, quality and wearing comfort are the most important drivers. Trends and brands are less important. They are open for second-hand clothing, although only a small segment already buys them regularly. They are willing to try sustainable offers if their favourite brands would offer and they even consider paying a fair surcharge (of 18% above the normal price). The reason for possibly buying sustainable clothing is altruistically driven (because of better working conditions and less harmful for the environment). Barriers differ among Millennials: for some it's a lack of information on what a sustainable garment is, for others the perception of a higher price is a barrier, and another subsegment does not want to spend too much time to find out what is sustainable and what not.

They are well familiar with online selling platforms, swapping events and renting garments. 1 in 3 is aware of the existence of clothing libraries. Millennials show a similar willingness for circular business models, as GenZ: A majority is willing to use repair services and more than 4 out of 10 Millennials is willing to use take back services and resellers. Leasing appeals only to a minority, while using a clothing library is appealing to 14% of the Millennials.

They associate ‘sustainable clothing’ with ‘low environmental impact’, ‘made in fair conditions’ and ‘high quality’. A larger segment (1 in 3) is well informed of the impact of the clothing industry, but an equally large segment is not at all informed. Ecolabels are helping them to make an informed decision. They show great confidence and trust in ecolabels and a substantial segment (46%) even prefers a garment that has an ecolabel. Influencers and mainstream media content on sustainable clothing may help them to be better informed.

GenX (age 45-56)

GenX is similar to the Millennials in their concern for the environment and their consumer behaviour in general. A small subsegment is not at all concerned or occupied with sustainability in their daily life. But a majority – and even more so GenX men – claim to be sustainable and to buy mainly necessity clothing. With increasing age, the average score for their current lifestyle increases too, and the gap with future intentions becomes smaller. GenX scores 6.07/10 for current sustainable lifestyle and promises to improve this a little (6.88/10) in the future. Their lifestyle values are slightly more ‘idealistic’ (towards ‘conscious consumerism’) than ‘materialistic). Clothing is for many a necessity, but not all-important for their self-image (similar to the Millennials).

Sustainable clothing is associated with ‘low impact’, ‘made in fair conditions’ and ‘high quality’. Barriers in general for buying sustainable clothes are related to the absence of knowledge on what is a sustainable garment and what not, and time needed to figure that out. The perception of a ‘higher price for sustainable clothing’ is only a barrier for a minor segment. 1 in 4 claims to be very aware of the impact of the clothing industry. The industry should take more than half of the responsibility to progress towards a more green clothing consumerism, according to GenX.

They spend the highest amount in comparison to the other generations, with GenX couples with kids spending the most (€200/month) on clothing. Only a minority (5%) buys regularly online. GenX likes to shop in smaller boutiques are in the shopping district. They buy more frequently in the upper middle segment and sometimes even designer brands.

When disposing undamaged garments, they tend to choose for a clothes bin (for reuse by a charity organization). 22% sells them online (which is a smaller portion than seen in younger generations).

Drivers to buy clothing are more pragmatic oriented, then other generations: wearing comfort, quality and textile materials are more important than price- and convenience-related drivers. While production-related drivers are marginal important for GenX women, trend-related drivers tend to be more important for GenX men. This last group is not bothered by price.

A majority prefers new garments, doesn’t buy second-hand clothing currently and is far less inclined to buy them via online shopping platforms in the future. The likelihood of using other sustainable business models (swapping, resellers, take-back services, clothing libraries) is smaller than the likelihood in the younger generations. Repair services though will probably have the biggest potential in GenX.

Although they adhere an important role to mainstream media in the dissemination of information, social media and its influencers might not have the most potential to reach GenX. In contrast to the Millennials, GenX does not have full confidence in ecolabels. Although GenX thinks ecolabels and the information they give are indeed important, they might not have an impact on their actual buying behaviour, especially so for GenX men.

Baby Boomers (age 57-74)

Within the Baby Boomers generation, significant differences can be seen in their perception and their individual actions: 13% is very pessimistic, but 22% has a strong believe in a positive outcome for one’s individual actions. They show the biggest concern towards climate change and keep this in mind while shopping. 75% is a conscious consumer, and only 1 in 3 is tempted to buy clothing on an impulse (while this portion is significantly bigger in the younger generations). They rate their current lifestyle as reasonably sustainable (6.43/10) and are not inclined to make any big changes anymore in that area (6.67/10). While they are sceptic towards ‘sustainable business promises’, companies should take the lead in the responsibility, while the government and the consumer have the least partake in responsibility towards a sustainable clothing industry.

Clothing is not that important and their lifestyle values are decidedly idealistic. Fun shopping is not a thing for Baby Boomers, nor is spending money on non-material things. They don’t strive to own luxury goods, but the concept of ‘owning’ is important. Drivers for buying clothing are highly production-related, pragmatic-related and trend-related (because of the unwillingness to buy second-handed clothes and the preference for new garments). But, in comparison to GenZ, price and convenience is not a main driver.

When they do buy sustainable clothing, altruistic drivers come first, but advantages for their personal health come in second. Although most of the Baby Boomers are well informed on the impact of the industry, a barrier to buy sustainable clothing is related to unclear information. They don’t experience a time-shortage to figure out this information. Information in ecolabels is important but not trustworthy.

In comparison with the younger generations, and especially in contrast with GenZ and the Millennials, Baby Boomers show little preparedness to use take-back services, online platforms for second-handed clothing, clothing libraries, leasing, swapping and resellers. Renting for an occasion and using a repair service has the most potential. Barriers are mainly due to ‘preference for ownership’ of garments.

Current limitations

Some current limitations in this research are:

- The results are based on stated behaviour. To detect actual behaviour, further research is necessary (‘say-do gap’)
- Considering cultural specificities in regard to buying clothing, extrapolation towards other regions is not a given.
- The study is limited in size (n=1738) and could benefit from a larger sample. The study could also be extended to Belgium.
- The results are in line with international research, but needs further comparison and analysis.

Further research

In this paper the emphasis is on the descriptive and correlational analysis, according to generation. Nevertheless, the data are up for further analysis based on other socio-demographic or psychographic variables. The data contains opportunities for different types of analysis (e.g. cluster analysis). The planned segmentation into different personae, will facilitate the drawing up of specific communication strategies linked to the previously identified sustainable business models. For example who is the primary and secondary target audience for rental or leasing models and how to approach them? Should focus be on providing information on the process or on hygiene measures? Should focus be on prices or on availability? Is a highly personalized approach most beneficial or does the selected business model allows broad advertisement? This broader research project (2021-2023) aims to offer user-friendly tools for creators in the fashion industry to aid them in their business model and go-to-market strategy. Whereas the overview of the sustainable business models might not be novel, the integration with the customer segments and the appropriate communication strategies are.

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