

COLLABORATIVE CONSUMPTION: PROPENSITY OF GENERATION 'Z' TO SHARE PRODUCTS (CASE IN POLAND)

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Purpose: The aim of the article was to examine Generation Z's propensity to share products in the context of the growing trend of collaborative consumption in the Polish market.

Design/methodology/approach: The objectives were achieved by conducting a theoretical review of the sharing economy, complemented by direct research on the propensity of young consumers to share selected products. The study was conducted using an online survey technique among 600 Polish consumers from generation 'Z' in 2023.

Findings: The research results indicate various motives driving Generation 'Z' towards collaborative consumption, encompassing economic, social, and environmental aspects. They also reveal the types of products this generation is more likely to share.

Research implications: In the future, it would be interesting to expand this research to include other countries (e.g. in Europe), different demographics (e.g. seniors), and the role of various factors influencing product sharing (e.g. social media, education).

Social and practical implications: The findings of this article contribute to understanding consumer trends among young people, which influence the behavior of future generations and demonstrate a concern for sustainability. They underscore the importance of educating young people about pro-environmental behavior, crucial for a sustainable future. The results provide insights into young people's propensity for pro-environmental actions and highlight the potential need for education in this area. Additionally, these findings can be valuable for enhancing the effectiveness of sales processes and methods businesses use to communicate with young consumers.

Originality/value: This article presents a unique contribution to the field of consumer behavior by specifically focusing on Generation 'Z' in the Polish market, a demographic often overlooked in collaborative consumption research. Its originality lies in its comprehensive examination of the multifaceted motives (economic, social, and environmental) that drive this generation towards shared consumption.

Keywords: collaborative consumption, sharing product, generation 'Z', Poland.

Category of the paper: research paper.

1. Introduction

In recent years, collaborative consumption has been at the heart of sustainability. “Sustainable development” was written in the Brundtland Report (1987, p. 16) and stressed the need to meet the needs of present generations without limiting the ability to meet the needs of future generations. To this day, the importance of the three dimensions of sustainable development, namely ecological, economic and socio-cultural, is underlined. Sustainable development is about conscious and sustainable consumption, i.e. consumption that saves resources.

In the concept of sustainable development there is room for collaborative consumption. Conscious and responsible consumption is one of the activities (directions) of the Green Economy. The aim of this course is to reduce environmental risks and the consumption of natural resources. In its document COM(2019)640 the European Commission proposes - in line with the assumptions of the Green Economy - increasing productivity while using fewer raw materials, reducing costs and reducing environmental impact. (http://ec.europa.eu/environment/basics/green-economy/sustainabledevelopment/index_pl.htm). A decisive aspect of the definition of the Green Economy is the scarcity of resources. Resources are scarce and therefore consumption choices have to be made. This means at the same time giving up on other, less important, needs (Ryszawska, 2013; Spangenberg, 2014).

The concept of collaborative consumption is based on the scarcity of resources in order to develop a sustainable approach to their use and product sharing. The concept of sustainable consumption also draws inspiration from one of the latest economic trends, the sharing economy. This economy is based on the possibilities of new technologies of distance communication. With the development of the Internet, people are able to communicate with each other faster and more efficiently. Collaborative consumption is a form of green consumer mobilization. Product sharing, which began a few years ago, first in the United States, is spreading to other countries and involves a growing range of consumer products and services. For several years, we can observe a growing interest of the young generation growing ecological awareness. People born after 1995 belong to generation ‘Z’. This generation has a stronger interest in sustainable consumption than previous generations. Ecological sensitivity is a characteristic of this generation, which affects their participation in product sharing.

In the interpretation of collaborative consumption, important are ecological aspects. In this perspective, the focus is primarily on issues related to the use of resources so as not to violate the well-being of the environment, but to ensure an adequate quality of life (Spodarczyk, 2018, p. 78). Collaborative consumption is a fundamental trend shaping individual consumer behaviour patterns (Bylok, 2013). The paradigm of this consumption is conscious consumption based on environmental responsibility. Consumers in sustainable economies are (should be) aware of their purchasing decisions (Jaros, 2015). The conscious consumer exposes in his

behavior characteristics such as: sufficiency of consumption, self-restraint, consumer abstinence, reduction of waste when meeting needs, sharing products, recovering products, repairing products, etc. (Czaja, Becla 2011, p. 48). In this consumption there is an important ecological aspect, which is to maximize the usefulness of consumption while preserving the usefulness and quality of natural resources and the natural environment. Sustainable development policies prefer forms of consumption that are least harmful to the environment (Kielczewski, 2004, p. 57-58; Łuczka, 2016, p. 139).

The umbrella for the conscious consumer is the determinants of sustainable consumption. Under this umbrella are human needs, as well as fair distribution of goods and services, quality of life, resource intensity, waste minimization, product lifecycle thinking, consumer health and safety, consumer sovereignty, and collaborative consumption (Mont, Plepys, 2008).

Demographic, social, political and economic changes are shaping new consumption trends. This trend is collaborative consumption among Generation 'Z'. New trends shaped by Generation Z are conditioned by an increase in education, health education, the effect of imitating the lifestyle of reference groups, an increase in the quality requirements of consumers reported in relation to the offer of goods and services on the market, higher ecological sensitivity than other generations, etc. It should be noted that an important prerequisite for the spread of collaborative consumption among the 'Z' generation is the development of information and communication technologies, which facilitate the matching of supply and demand for 'free' goods and services. Increasingly widespread consumer access to the Internet, social networks, the possession of modern mobile devices and access to online payment systems enable collaborative consumption initiatives. The rapid development of computer technologies (ICTs) and the Internet is a determinant of collaborative consumption. Technology has an impact on the creation of collaborative consumption platforms.

Collaborative consumption has been growing over the last decade with the development of the Internet and computer technologies (ICTs). Mobile devices are used for communication in collaborative consumption. The group of computer and mobile device users is increasing along with access to the Internet and computers. According to data, there were already about 1.5 billion users worldwide in 2010. By 2020, there were 4.66 billion, or 59.5 per cent of the population - using the Internet. In the last decade, the number of Internet users has increased by more than 3 billion users. Young people belong to generation 'Z' use the mobile devices often then aothers. More and more people are spending their time online, doing more things there than ever before (the average internet user spends 6 hours and 43 minutes online every day, or more than 100 days a year and more than 40% of their life (Digital Report, 2020). In modern society, the collaborative consumption very often start from contact by Internet, where people inform what they need.

Collaborative consumption involves making connections between strangers, through different forms of communication, in order to participate in the exchange of products (Schor et al., 2014, pp. 4-6; Schor, 2014). Many countries have exchange platforms, e. g. pet care,

exchange of expensive electronic equipment, renting a bike, surfboard, snowboard (Spinlister), exchange of prepared food, WiFi network, exchange of work done, car sharing, neighbourhood help, home repair services, etc. (Camilleri, 2021; Kumar et al., 2020).

The aim of the article is to draw attention to the approach of Generation 'Z' to the concept of collaborative consumption and lending of products. Collaborative consumption is supposed to refer to the concept of sustainable development and provide an alternative to consumerism. Sharing products by individual consumers can help to reduce the negative effects of mass consumption.

This paper consists of two key sections. The first part of this paper presents the concept of collaborative consumption and compares it with the consumer attitudes of Generation 'Z'. The second part of the paper presents the results of direct research. The orientation of consumers – Generation 'Z' – towards collaborative consumption is a phenomenon that is the subject of research. The study was conducted in Poland among 600 representatives of Generation 'Z' in 2023. The survey questionnaire was used as a research tool.

Such research questions (RQ) were stated:

RQ1: What are the main attributes of Polish Generation 'Z'?

RG2: What the most popular attitudes of Generation 'Z' consumers towards diverse market phenomena, life, environment, ecology and sharing?

RG3: Which benefits motivate Generation 'Z' consumers to engage in product sharing?

RQ4: What are the preferences of Generation 'Z' consumers for sharing selected products?

2. Collaborative consumption vs Generation 'Z'

Today, consumption is the use of material goods and services to satisfy human needs, as well as a determinant of the standard of living and a criterion of the structuring of society and a way of communicating the identity of individuals (Sobczyk, 2014, p. 88). Changes in the market for consumer goods lead to positive as well as negative social, economic and cultural phenomena. In recent years, worldwide, including in Poland, consumption known as collaborative consumption has grown in strength and importance. It is a consumer response to global environmental and social problems. Collaborative consumption is part of sustainable development and a form of organic consumption (Bylok, 2016; Łuczka, 2016). The goal of collaborative consumption is to reduce external negative environmental effects. Collective consumption is also referred to as "consumer cooperation", "cooperative consumption" or "collaborative consumption, sharing economy". Collective consumption is a model of consumption based on free and paid sharing, resale, exchange and lending of goods and services (Sobczyk, 2014, p. 100). The point of this idea is to save money on the purchase of new items. Moreover, this consumption is geared towards more rational use of products and flexibility in

meeting consumer needs. The market of collaborative consumption, exchange of goods, displaces property, creates temporary property, has recently been developing particularly dynamically in the USA, where the subject of trade are real estate (e.g. converting holiday homes, renting accommodation), cars, sports equipment (Mróz, 2013, p. 147).

Collaborative consumption is one of the consumer initiatives that fits into the form of the sharing economy. The forms of this economy are: sharing, bartering (from barter), lending, renting, recycling, do it yourself, open gardening, (visiting in private gardens), voluntary help, shareownership, repairing, common buying (Słupik, 2015). Collaborative consumption is a form of social movement against excessive consumption. It is one form of de-consumption. Deconsumption on the one hand (Zrałek, 2012) and collective consumption on the other. Opposite trends are emerging, focusing on de-consumption and a move away from hyper-consumption. Sharing consists in consciously and purposefully limiting the volume of goods consumed. It is simply consumption based on sharing products. Moreover, collaborative consumption is an alternative lifestyle: this approach involves promoting a new lifestyle, contrary to consumerism (Kryk, 2011). This consumption forms part of a holistic approach to sustainable consumption, which takes into account social and economic aspects as well as environmental aspects.

The benefits of the decision to share products are, on the one hand, for the environment, on the other, for the consumer himself, his budget and even well-being, as well as for the local community in which he functions (building social bonds). There is also a cost aspect to collaborative consumption, sharing is cheaper than the price of new products. Consumers are consciously giving up on previously purchased products in favour of sharing. Sharing products is an alternative to buying more products. Collaborative consumers are also aware of the costs they incur in making decisions consistent with the adopted attitude (Spodarczyk, 2018, p. 79).

Collaborative consumption changes its course: from a grassroots initiative to an organized one. In order to fully exploit the potential of sharing, it is necessary to combine spontaneous social practices with sustainable development programs for cities and municipalities. Incorporating collaborative consumption into policies means integrating social activities and embedding product sharing practices in the political and legal order. The implementation of collaborative consumption patterns by households requires active state policies tailored to specific national, regional and local conditions.

An important direction in terms of efforts to increase the role of this consumption in economies seems to be an emphasis on increasing social awareness aimed at saving products and thus the resources needed to produce them (Seyfang, 2009). Consumer awareness is shaped by generally accepted social norms, information in the mass media, formal and informal environmental education and government actions. The main function of awareness in collaborative consumption is to enable other consumers to use a product without having to buy a new one, especially when the product is seldom used (consumed). Conscious consumers are adjusting their needs and shopping habits and are increasingly choosing sharing products.

Through their choices, they influence manufacturers and somehow force changes in product life cycles (Słupik, 2015).

The noticeable trend towards decreasing consumption among some groups of society is due not only to the fad for a healthy, economical lifestyle. Such behaviour is also stimulated by recession and fears of its consequences, dematerialization of consumption, increasing qualitative aspirations in consumption, lowering of the status of consumption in the system of human values, protection of natural resources (Bywalec, 2007, p. 151; Dąbrowska et al., 2015).

The importance of this consumption for Generation Z is linked, on the one hand, to an increase in environmental awareness and, on the other hand, to an increase in environmental responsibility. Being a responsible consumer means being aware of the consequences of their decisions, wanting to limit their negative effects and, as a result, reaping the benefits of doing so.

The way Generation 'Z' is defined, and in particular the range of birth years attributed to it, varies depending on the type of source. However, the most common assumption in research is that Generation Z is generally composed of people who were born from 1995 to 2010, choosing this range due to different consumer experiences, such as new technological developments, socioeconomic trends (Jaciow et al., 2021; Dimock, 2019; Ismail et al., 2021).

Although the term "Generation Z" has no formal basis, it is widely accepted and used. In addition, other names are also used to highlight the age group's deep ties to new technologies, especially the internet and mobile devices. These terms include Digital Natives, iGeneration, Screeners, Selfie Generation (Grabiwoda, 2019). Studies also sometimes use the term "Generation C", which refers to the word connected, thus indicating a constant connection to the network of this group of consumers (Aniszewska, 2015).

In 2020, Generation 'Z' accounted for about 1.3 billion young people worldwide (EY Report, 2021) and includes people between the ages of 14 and 24. EY's research shows that Generation Z is different from previous generations (especially millennials growing up during the economic boom). Generation Z formulated its identity during the Great Depression, then the global pandemic. This generation has also experienced growing political polarization in a world dominated by digital technologies such as smartphones, social media and the constant flow of information. Faced with an unpredictable global economy and the challenges of climate change, this generation must adapt to a rapidly changing technological world. This requires them to develop new skills and ways of thinking that will be adapted to new contexts and shaped by their educational experiences.

Generation 'Z' is characterized by distinct preferences and behaviours in terms of: technology used (dominant: MacBook, iPad, Facebook, Twitter, Wiki, Android), factors influencing them (primary sources of information and inspiration are: online forums, online communities), trends and values in education (their learning styles are based on multimedia, multiculturalism, e-learning, interactivity), leadership approaches (referring to inspiration, creativity, financial management (prone to impulse purchases, especially online, getting into

debt) and response to marketing communication (preferred interactive and new media campaigns, engaging in digital marketing) (Mazurek-Lopacińska, Sobocińska, 2015; Aniszewska, 2015, [www¹](#)).

Generation 'Z' representatives have specific characteristics in terms of consumption that are closely related to their technological, educational and social experiences (Mazurek-Łopacińska, Sobocińska, 2015, p. 146). Very good knowledge of the latest gadgets and technologies influences their way of consumption, preferring products that are technologically advanced and easily available online. They base their purchasing decisions on online reviews, forum discussions and social media recommendations. They choose products and services that are consistent with the values conveyed by educational applications, online courses and products that support multiculturalism. The generation is characterized by mobility, openness to other cultures and willingness to experiment. She prefers teamwork and diversity, avoiding routine and career stability. They are capable of multitasking, but have difficulty concentrating on a single task. This generation expects personalization and values experience more than material possessions, while demonstrating ecological awareness and social responsibility (Hysa, 2016, p. 389). Understanding the unique characteristics and conditions in which Generation Z grows up is key to predicting their impact on future social, economic and technological trends. Their adaptability, digital literacy and early experience may have long-lasting implications for how future societies, labour markets and the forms and ways of consuming goods and services are shaped (EY Report).

Growing up in the digital age and facing global challenges such as climate change and economic uncertainty, Generation 'Z' tends to seek more sustainable and flexible forms of consumption. Sharing products and services responds to their needs for sustainable living and flexibility, while offering an alternative to traditional ownership models.

3. Research approach

In the context of the increasing trend of collaborative consumption in the Polish market, direct research was conducted to understand the propensity of young consumers to participate in the sharing economy.

The survey was conducted in 2023 (September - October), utilizing an online survey method with a sample of 600 Polish Generation Z consumers. Participants in the study were born between 1995 and 2009. The age distribution within the sample was maintained. The link to the questionnaire was made available on the "Webankieta" page and disseminated through the most popular websites, social media, and email targeting young people (born after 1995). In this

¹ Generations defined, Mccrindle Research, www.mccrindle.com.au/app/uploads/2018/03/Generations-Defined-Sociologically.pdf, 12.12.2023.

study, respondents were selected using a non-random selection method and the selection criterion was age. Consequently, nearly 800 respondents participated, out of which 600 fully completed questionnaires were qualified for further statistical analysis. The average time taken by the respondents to complete the questionnaire was 11 minutes.

The online survey questionnaire was constructed primarily of closed-ended questions and those containing measurement scales. Respondents, while answering the questions, had the option to select one or several responses, but they could continue with the questionnaire while skipping any question, and they were not able to return to questions to which they had already responded. Additionally, they were only permitted to participate once in completing the questionnaire.

In the research sample, 64.2% of the participants were women, and 35.8% were men. The respondents were aged between 14 and 28 years, with an average age of 20 years. The largest group of respondents was 19 years old, accounting for 23.5%. Almost the same number of respondents declared that they were either working or not working professionally. For those not working, the primary source of income was pocket money from parents (40.8% of respondents). One-third of the respondents came from a four-person household, and one-fifth from a three-person household or larger than five-person household. Most of the respondents who were students reported living with their parents in an apartment/house (60%), while others rented an apartment or a room (18.3% and 8.5%, respectively), 6.1% lived in student dormitories, and 7.1% in their own apartment. Over 3/5 of the survey participants rated their household's situation as "very good" and "good", while 1/3 rated it as satisfactory. Table 1 presents an overview of the characteristics of research samples.

Table 1.

Characteristics of research sample (N = 600)

	Item	in %	
Gender	women	64.2	
	men	35.8	
Age	minimum	in years 14.0	
	maximum		28.0
	average age		20.0
Activity professional	working	49.8	
	not working	50.2	
Income source	work	49.8	
	scholarship	4.7	
	pocket money from parents	40.8	
	pocket money from others	4.7	
Number of household members	1 person	3.6	
	2 persons	11.8	
	3 persons	25.4	
	4 persons	34.2	
	5 persons and more	25.0	
Residence status	with parents	60.0	
	rent an apartment	18.3	
	rent a room	8.5	
	in student dormitories	6.1	
	own apartment	7.1	

Cont. table 1.

Self-assessment of the material situation	very good	14.1
	good	48.2
	sufficient	33.1
	bad	3.6
	very bad	1.0

Source: own study.

The propensity of Gen 'Z' consumers to share a variety of products was examined using data analysis software - SPSS Statistics. The attitudes of consumers towards the growing trend of shared consumption and the tendency to share selected products were examined using a 5-step measuring scale – Likert. The Likert scale motivated respondents to identify their characteristics by choosing one of two opposing options. The scale used was considered reliable (internal consequence acceptable) because the Cronbach alpha value was 0.77 (George, Mallery, 2016, p. 240).

4. Propensity of Generation 'Z' to share products in Poland - results of direct research

This research was aimed at recognizing the Polish Generation Z's propensity to share selected products, focusing specifically on identifying the following: psychographic characteristics of Generation Z, the perceived benefits that would motivate them to share products, and the respondents' preferences for sharing different types of products (such as borrowing from someone, lending to someone, and group purchasing).

Complementing the demographic and social profile of Generation 'Z' consumers is a collection of personality traits researched in Poland (an element of their psychographic profile). On a five-point intensity scale, the respondents evaluated the extent to which the specified traits apply to their personalities.

Researchers from Generation 'Z' assessed their personality traits. All average scores of the listed personality traits are above 3.15 (rather positive). The study participants rated loyalty the highest (average 4.58), and trust in others the lowest (3.15). Respondents also rated their resourcefulness highly (4.14). Studies show that the largest percentage of respondents are characterized by loyalty, resourcefulness, assertiveness and innovation (Table 2).

Table 2.

Personality traits of Generation 'Z' Consumers - survey participant evaluations

Item	in %*					Average ratings	Item
	1	2	3	4	5		
Disloyal	1.3	0.7	5.4	23.8	68.8	4.58	Loyal
Not resourceful	2.9	6.3	11.8	32.3	46.8	4.14	Resourceful
Not assertive	6.2	12.0	19.9	30.5	31.4	3.69	Assertive
Traditionalist	6.1	11.5	28.3	27.2	27.0	3.57	Innovative

Cont. table 2.

Selfish	6.8	12.5	29.1	29.4	22.3	3.48	Altruistic
Spendthrift	10.3	15.9	22.1	26.0	25.8	3.41	Frugal
Reserved	11.8	18.9	17.0	25.3	27.0	3.37	Open
I don't trust others	13.2	18.4	25.2	26.4	16.9	3.15	I trust others

* Evaluations on a Scale from 1 to 5.

Source: own study.

The psychographic characteristics of Generation ‘Z’ consumers also consist of their attitudes towards life, environment, ecology and sharing. Pro-ecological attitudes are declared by most respondents although they have different approaches to sharing products. More than 86% of respondents care about the environment naturally by saving, for example, energy, water. A healthy and sporty lifestyle leads almost 58% of respondents, regularly practicing sports. Nearly 3/4 of consumers are willing to lend their things to others but prefer to use new things than those already used by others. About 2/3 of the surveyed Generation Z do not like to use things borrowed from other people. Almost the same percentage of participants prefer to own products rather than just have access to them. One in two respondents likes to keep up with current trends and fashions (58.3%). The decisions made by Gen ‘Z’ consumers are circumstantial. More than 73% of respondents make decisions depending on the situation and not based on critical thinking. Despite the fact that about 66% of respondents easily connect with other people, more than 55% of them care about what other people think of them. More than half of respondents easily adapt to changes (57%) and do everything at the last minute (51.9%) (Table 3).

Table 3.

Approach to Life of the Generation ‘Z’ Consumers in the opinion of survey participants (in %)

Item	in %
I complete my tasks ahead of schedule.	48.1
I leave everything until the last minute.	51.9
I easily establish connections with other people.	66.3
I have difficulty making contact with other people.	33.7
I willingly use items borrowed from others.	31.7
I dislike using items borrowed from others.	68.3
I take care of my physical condition. regularly engage in sports.	58.3
I don't take care of my physical condition.	41.7
I make decisions based on rational criteria.	26.2
I make decisions based on the situation.	73.8
I care about what other people think of me.	55.8
I don't worry about what others think of me.	44.2
I easily adapt to changes.	57.9
I am reluctant to embrace any changes.	42.1
I prefer using new things.	74.3
I prefer using items that have already been used by others.	25.7
I care about the natural environment (e.g. I save energy/water. sort waste).	86.5
I don't consider the natural environment.	13.5
I willingly lend my belongings to others.	76.1
I never lend my belongings to others.	23.9

Cont. table 3.

I like to keep up with current trends and fashion.	58.3
I'm not interested in new market trends.	41.7
I only need access to the product.	35.1
I prefer to own products.	64.9

Source: own study.

Generation 'Z' consumers surveyed were asked to identify the perceived benefits that motivate them to engage in product sharing. All of these product-sharing aspects are relevant to the study participants (means above 3). For the respondents, the most important is to improve the standard of living and comfort of life (mean 4.18), to save money from buying a product (4.11) and to feel sensible and responsible (4.06). The least important, though important, is for them to participate in the wider movement against excessive consumption. The majority of study participants rated the individual benefits of sharing highly on 4.0 (Table 4).

Table 4.

Respondents' Motivation for Product Sharing - survey participant evaluations

Item	in %*					Average ratings
	1	2	3	4	5	
Improving your quality of life and comfort	1.4	3.2	9.3	48.0	38.0	4.18
Saving money on buying the product	3.3	3.5	7.1	50.8	35.3	4.11
Feeling sensible and responsible	3.7	4.3	11.8	42.4	37.8	4.06
Saving money on maintaining and servicing the product	2.6	3.8	12.7	54.5	26.4	3.98
Experience something interesting	3.6	8.9	19.4	46.4	21.7	3.74
Producing less electronic waste	6.8	7.7	15.9	46.5	23.2	3.71
The opportunity to meet new people	7.6	8.2	15.8	45.7	22.7	3.68
The ability to use a product that you could never afford to buy	4.5	8.2	26.0	40.8	20.5	3.64
Reducing CO2 emissions	8.9	7.8	17.7	42.7	22.9	3.63
The ability to immediately satisfy your needs without buying a product	5.3	13.9	23.7	44.9	12.1	3.45
Limiting your own consumption	4.4	10.8	35.4	39.7	9.8	3.40
Being part of a broader movement against excessive consumption	10.9	13.2	36.1	29.5	10.4	3.15

* Evaluations on a scale from 1 to 5, where 1 means 'Definitely Not Important' and 5 means 'Definitely Important'.

Source: own study.

Respondents also stated their preferences for sharing different products in the context of borrowing products from someone, lending products to someone and common purchase of products. Consumers admitted that they would consider borrowing items such as a tent (average 4.41), car accessories such as a roof box, bike rack (4.18) and printer (3.93). They would be reluctant to lend someone products such as laptop and tablet (2.38 and 2.7 respectively), car and motorcycle (2.56 and 2.50). Respondents are more negative about borrowing something from someone (most average ratings lower than when lending individual products, except laptops and cars). Joint purchases of these products are rated lowest by them. Respondents admitted that only a printer and a caravan are more willing to co-purchase than to lend their private one to someone or from someone (Table 5).

Table 5.*Sharing selected products in the opinion of survey participants (average rating*)*

Item	borrowing from someone	lending something to someone	buying together
laptop	2.43	2.38	2.00
Printer	3.64	3.93	3.80
Tablet	2.55	2.77	2.19
Tent	4.07	4.41	3.90
Camping trailer	3.21	3.37	3.49
Bicycle	3.53	3.79	2.30
Skis/snowboard	3.27	3.63	2.47
Windsurfing/kitesurfing equipment	3.23	3.59	2.69
Electric scooter	3.22	3.34	2.75
Car	2.61	2.56	2.40
Motorcycle	2.25	2.50	2.14
Car accessories such as a roof box, bike rack	3.93	4.18	3.63
Other**	3.11	3.27	2.88

* Evaluations on a Scale from 1 to 5, where 1 means 'Definitely No' and 5 means 'Definitely Yes'.

** Other indications included: writing and sports accessories, e-book reader, wireless speaker, phone, headphones, helmet, roller skates, hair dryer, tools, lawn mower, books, clothing (borrowing from someone); camera, wireless speakers, clothing, subscriptions i.e. access to electronic products, headphones, phone and charger, instruments, household appliances, lawn mower, books (lending something to someone), home/flat, tools rarely used at home (buying together).

Source: own study.

It was also cognitively interesting to identify with whom the survey participants would be willing to share products or purchase them together. The vast majority of respondents (more than 80%) are willing to lend something to their friends, extended family members, colleagues, acquaintances or neighbors. When borrowing something from someone, on the other hand, the majority of respondents prefer unknown people such as those found on the Internet (over 58%). One in three respondents deciding to shop for products together would do so only with immediate family, e.g. parents siblings (Figure 1).

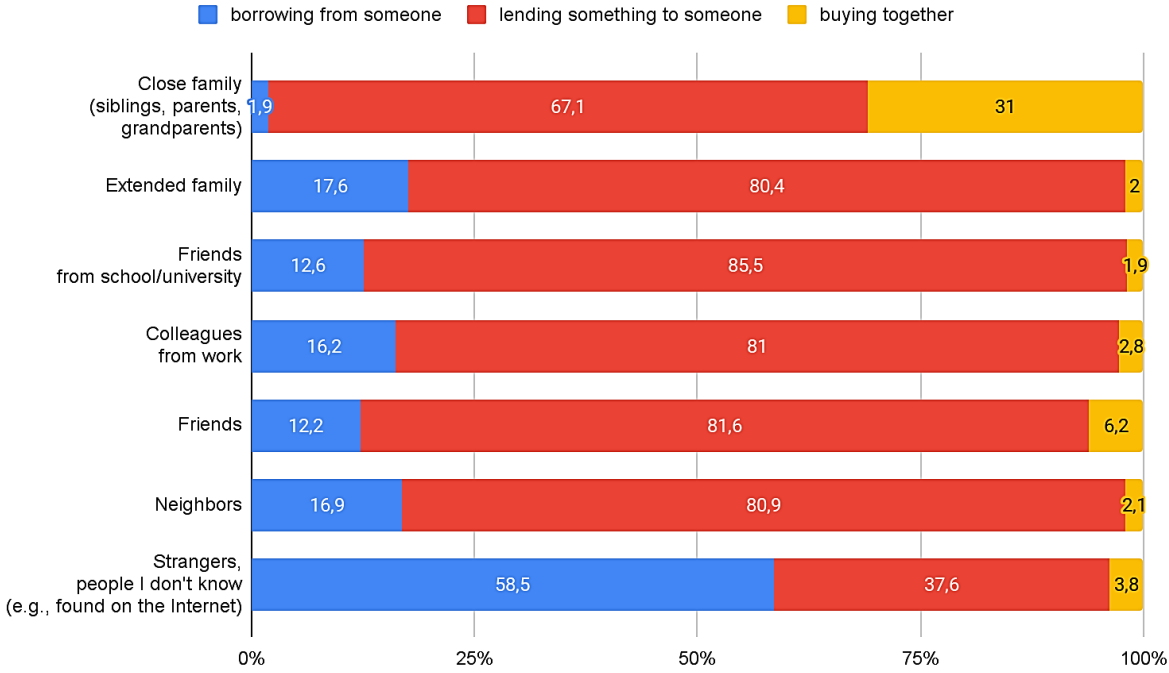


Figure 1. People with whom respondents would be willing to share products (in %).

Source: own study.

Participants in the survey listed online applications/websites they use to share products with others or make joint purchases. When making joint purchases, almost 2/3 of surveyed consumers use sites such as Aliexpress, Allegro, Amazon, Temu, Ebay, Gumtree. As many as 1/3 of them co-use movie streaming services (Disney+, HBO, Amazon Prime, Player, Netflix) and music streaming services (Youtube, Spotify). One in four respondents use websites and apps dedicated to sales (OLX, otomoto, Selling) and clothing products (e.g., Vinted, Bershka, Zalando). Respondents are least likely to use social media or apps/websites dedicated to cosmetics, electronics, accommodation, food and transportation for this purpose (Figure 2).

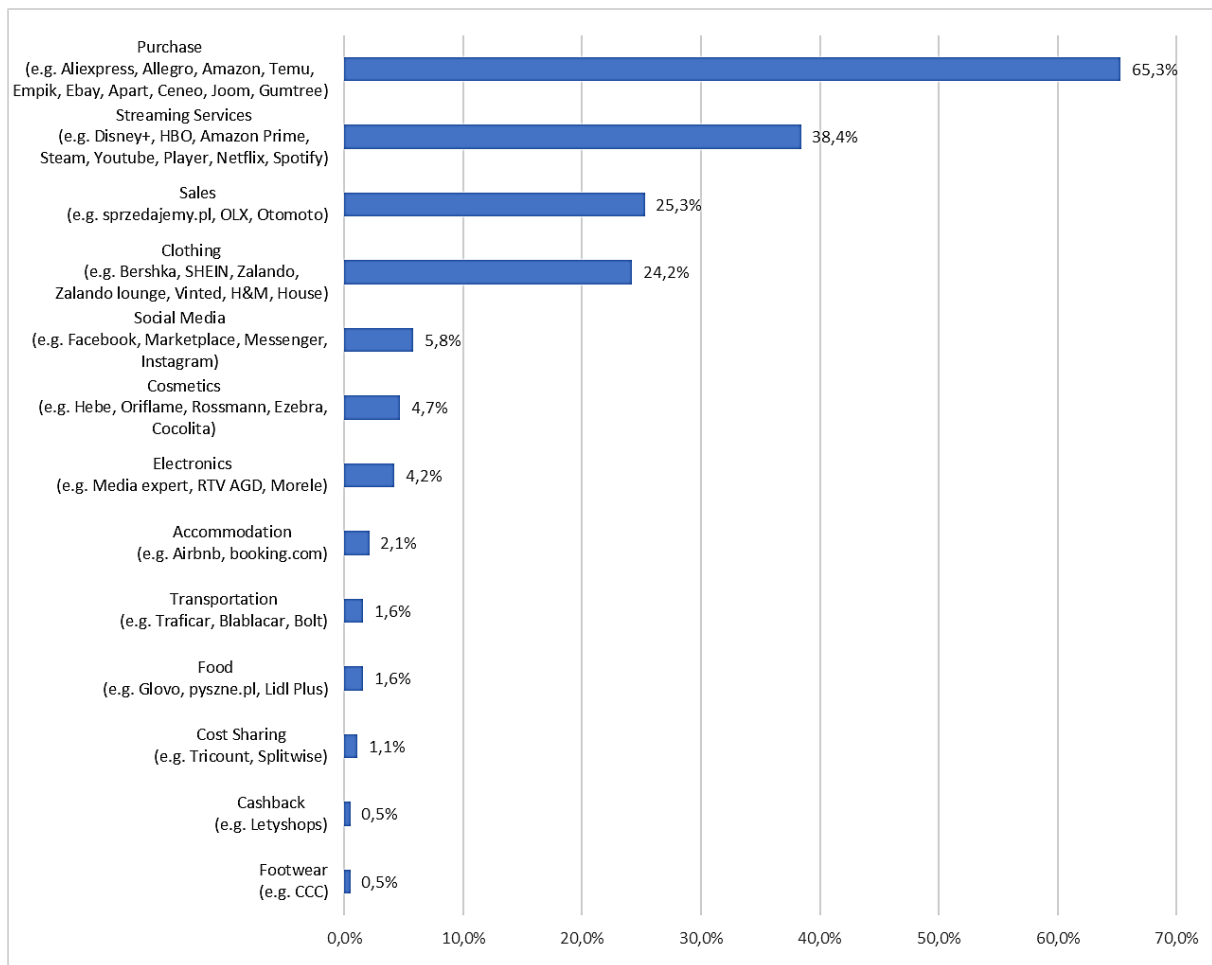


Figure 2. Online applications/websites for joint purchases (product sharing) used by respondents (N = 190, in %).

Source: own study.

5. Discussion

The results of the study are in line with other ongoing studies on the growing trend of sustainable consumption. They show that Polish consumers are showing more and more conscious and sustainable consumer behaviour on the market, especially for economic and environmental reasons. For the vast majority of Poles (about 85%), it is important to take care of the environment, which is reflected in the saving of resources (e. g. water, plum) and the preference to do some things yourself instead of buying them (Gajdzik, Jaciow, Wolny, 2023). A similar phenomenon is observed among young Poles aged 16-24 representing Generation 'Z', for whom the issue of climate and environmental protection is very important. Their ecological commitment is reflected in such declassified behaviours as, among others: buying organically produced products, limiting the use of aerosols and meat consumption, cycling, drinking water or saving energy. Young people's ways of taking care of the

environment when shopping are mainly buying second-hand clothes, buying products that reduce the use of plastic (Mediahub Report, 2022).

There are also phenomena related to the limitation of consumption and the non-purchasing of new products due to the purchase of “second-hand” products or the sharing of certain categories of products/services. It is becoming increasingly popular to use services that are part of the sharing economy trend, especially those related to transport. This is confirmed by studies relating to the sharing and use of means of transport. Research results show that the idea of ridesharing is becoming increasingly popular among young consumers in Poland (Stolecka-Makowska, Wolny, 2018). Although this trend is more developed in Western markets (e.g. Italy) than in Poland, studies show that sharing economy services will develop in a similar direction among young Poles (Kowalska, 2019).

Studies show that Polish young consumers aged 18-38 are also increasingly interested in redistributing second-hand goods (buying and using second-hand products). The most frequently purchased product category are cars, books, clothing and hobby products (Wilczak, 2019). While the degree of acceptance of co-consumption behaviour (exchanging products with others, renting less-used items, sharing them for a fee, group shopping) is high among the 18 to 40 year olds surveyed, most of them do not practice such behaviour. The exception is young people, among whom sharing products/services is much more common (Sobczyk, 2018). Studies show that the higher the value of goods, the less likely younger consumers are to be willing to share them. They are primarily interested in collaborative consumption because of their ability to earn money and wider access to a wide range of goods and services (Zalega, 2018). Other studies confirm the positive attitude of Polish consumers of Generation ‘Z’ to the concept of co-consumption and its most popular manifestations. They point out that the Generation ‘Z’ consumer is becoming a conscious and responsible buyer who cares about the environment. This is reflected in the behaviour of consumers of this generation who are increasingly giving up property (negative attitudes towards consumer lifestyles) and choosing alternative ways of meeting their needs (based on exchanging, lending and sharing their own resources with others through platforms and apps) (Paczka, 2020).

Moreover, recent studies in the US show that sustainability drives consumer demand and loyalty for clothing products, especially those representing Generation ‘Z’. Among this group of consumers, the service of renting clothes (shared consumption of clothes) is very popular (McCoy, Wang, Chi, 2021).

Following the trends emerging on the American, European and Polish markets, it can be assumed that the phenomenon of co-consumption will develop more and more. Collaborative consumption can be a viable solution for reducing the production of certain categories of products (e. g. clothing, books) and a new, innovative business model for companies.

6. Conclusions

In modern economies, governments are increasingly calling for conservation of natural resources, more and more everyone hears about the Green Economy. Every one of us can be a responsible consumer. There are different types of consumers on the market (Gajdzik et al., 2023). Among them are those who are interested in high-quality products, saving money, saving shopping time, and enjoying the shopping experience. In each groups we can meet responsible consumers (Gajdzik et al., 2023; Jaciow et al., 2022). One form of responsible consumption is sharing consumption. The aim of the study was to determine the degree of participation of Generation 'Z' in cooperative consumption. The authors conducted direct research among people born after 1995. Based on the studies carried out, it has been established that the 'Z' generation is interested in what happens in the environment, and therefore also in cooperative consumption. Tested products (writing and sports accessories, e-book reader, wireless speaker, phone, headphones, helmet, roller skates, hair dryer, tools, lawn mower, books, clothing (borrowing from someone); camera, wireless speakers, clothing, subscriptions i.e. access to electronic products, headphones, phone and charger, instruments, household appliances, lawn mower, drill, books (lending something to someone), home/m tools rarely used at home (buying together) are most often shared (rented). For the participants of the study (means above 3 values), many aspects of cooperative consumption were involved. People exchange products over the Internet, which is today the primary source of communication. For the respondents, the most important thing is to improve the standard of living and comfort of life (mean 4.18) by sharing products. In second place is the saving of money related to the purchase of unnecessary products (4.11) and in third place the sense of being reasonable and responsible (4.06). Generation 'Z' highly rated the idea of cooperative consumption and the benefits associated with it.

Collaborative consumption based on the sharing of goods (products) is part of the new Industry 4.0/5.0 development concept (Gajdzik et al., 2021). Societies, according to the requirements of the new concept, must engage more strongly in environmental responsibility. Therefore, it is worthwhile to carry out research among the youngest generation in the consumption market, which is the 'Z' generation. This generation will, over the next few years, adopt attitudes (behaviors) that are important for responsible development. However, there are many temptations or barriers to cooperative consumption, and one of them is the happening personalization of products and services (Saniuk et al., 2020). Generation 'Z', despite being sensitive to changes in the environment, is at the same time being heavily 'bombarded' with products just for it/us.

Our further research will seek to determine how the bipolarity of consumption, i.e., sustainable consumption on the one hand, and strong personalization of products and ease of online purchase on the other, affect the young consumer base.

Acknowledgements

The present article is a part of a scientific research that was realized by scientists from the University of Economics in Katowice in cooperation with B. Gajdzik at the time of her internship.

References

1. Aniszewska, G. (2015). Zmiany pokoleniowe a decyzje i wybory konsumenckie. *Marketing i Rynek, 1*, 4-6.
2. Bylok, F. (2013). *Konsument. konsumpcja i społeczeństwo konsumpcyjne we współczesnym świecie*. Katowice: Śląsk.
3. Bylok, F. (2016). Konsumpcja hedonistyczna a konsumpcja etyczna. Czy potrzebna jest społecznie odpowiedzialna konsumpcja. *Studia i Prace WNEiZ US. 44/2*, 39-55.
4. Bywalec, Cz. (2007). *Konsumpcja w teorii i praktyce gospodarowania*. Warszawa: PWN, 151.
5. Camilleri, M.A. (2021). E-commerce websites, consumer order fulfillment and after-sales service satisfaction: The customer is always right, even after the shopping cart check-out. *Journal of Strategy and Management*, <https://doi.org/10.1108/JSMA-02-2021-0045>.
6. Czaja, S., Becla, A. (2011). Czterech jeźdźców ekologicznej zagłady we współczesnym świecie. In: B. Kryk (ed.), *Trendy i wyzwania zrównoważonego rozwoju*. Szczecin: Zapol.
7. Dąbrowska, A., Bylok, F. Janoś-Kresło, M., Kielczewski, D., Ozimek, I. (2015). *Kompetencje konsumentów. Innowacyjne zachowania. Zrównoważona konsumpcja*, Warszawa: PWE, 81-96.
8. *Digital 2020 Global Digital Overview* (January 2020). Available online: <https://www.slideshare.net/DataReportal/digital-2020-global-digital-overview-january-2020-v01-226017535>.
9. Dimock, M. (2019). Defining generations: Where Millennials end and Generation Z begins. *Pew Research Center, 17*(1), 1-7.
10. Dreyer, Ch., Stojanova, H. (2023). How entrepreneurial is German Generation Z vs. Generation Y? *Procedia Computer Science, 217*, 155-164.
11. European Green Deal. Komunikat Komisji do Parlamentu Europejskiego. Rady Europejskiej. Rady. Komitetu Ekonomiczno-Społecznego i Komitetu Regionów. Bruksela 11.12.2019. COM(2019)640 Final. Available online: <https://eur-lex.europa.eu/legal-content/pl/TXT/?uri=CELEX%3A52019DC0640>, 15 June 2021.
12. Gajdzik, B., Grabowska, S., Saniuk, S. (2021). Key socio-economic megatrends and trends

- in the context of the Industry 4.0 framework. *Forum Sci. Oeconomia*, 9, 5-22.
13. Gajdzik, B., Jaciow, M., Wolny, R. (2023). Types of E-Consumers and Their Implications for Sustainable Consumption-A Study of the Behavior of Polish E-Consumers in the Second Decade of the 21st Century. *Sustainability*, 15(16), 12647, <https://doi.org/10.3390/su151612647>.
 14. George, D., Mallery, P. (2016). *IBM SPSS statistics 23 step by step: A simple guide and reference*. New York: Routledge.
 15. Grabiwoda, B. (2019). *E-konsumenci jutra. Pokolenie Z i technologie mobilne*. Łódź: Wydawnictwo Nieoczywiste.
 16. Green Economy, EU. Retrieved from: [http://ec.europa.eu/environment/basics/green-economy/sustainable development/index _pl.htm](http://ec.europa.eu/environment/basics/green-economy/sustainable%20development/index_pl.htm)
 17. Hysa, B. (2016). Zarządzanie różnorodnością pokoleniową. *Zeszyty Naukowe Politechniki Śląskiej. Seria: Organizacja i Zarządzanie*, 97, 389.
 18. Ismail, A.R., Nguyen, B., Chen, J., Melewar, T.C., Mohamad, B. (2021). Brand engagement in self-concept (BESC). value consciousness and brand loyalty: a study of generation Z consumers in Malaysia. *Young Consumers*, 22(1), 112-130.
 19. Jaciow, M., Wójciak, M., Poradowska, K. (2021). Ecological behaviour of generation Z in Poland. *Acta Sci. Pol. Oeconomia*, 20(3), 15-22.
 20. Jaciow, M., Wolny, R. (2022). *Polski e-Konsument. Dekada Zmian*. Gliwice: Helion.
 21. Jaros, B. (2015). *Koncepcja zrównoważonej konsumpcji - problemy implementacji w Polsce [The concept of sustainable consumption - problems of implementation in Poland]*. Rozprawa doktorska. Faculty of Economics. Management and Tourism. Retrieved from: <https://wir.ue.wroc.pl/info/phd/WUTc98a41239d264848afb7414d37d6f1b9/>
 22. Kielczewski, D. (2004). *Konsumpcja a perspektywy trwałego i zrównoważonego rozwoju*. Białystok: Wydawnictwo Uniwersytetu w Białymstoku.
 23. Kowalska, S. (2019). Zachowania Konsumentów w obliczu rozwoju sharing economy. *PTiL*, 3(47), 39-52.
 24. Kryk, B. (2011). Konsumpcja zrównoważona a proekologiczne style życia. *Studia i Materiały Polskiego Stowarzyszenia Zarządzania Wiedzą*, 51, 206-218.
 25. Kumar, V., Ramachandran, D., Kumar, B. (2020). Influence of new-age technologies on marketing: a research agenda. *Journal of Business Research*. 125(3), DOI: 10.1016/j.jbusres.2020.01.007.
 26. Łuczka, W. (2016). Zrównoważona konsumpcja i uwarunkowania jej rozwoju/ Sustainable Consumption and Determinants of Its Development. *Handel Wewnętrzny*, 6(365), 136-145.
 27. Mazurek-Łopacińska K., Sobocińska M. (2015). Wirtualizacja komunikacji marketingowej w kontekście przemian pokoleniowych i zmian stylów życia. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Problemy Zarządzania, Finansów i Marketingu*, 39, 146.
 28. McCoy, L., Wang, Y.-T., Chi, T. (2021). Why Is Collaborative Apparel Consumption Gaining Popularity? An Empirical Study of US Gen Z Consumers. *Sustainability*, 13, 8360,

<https://doi.org/10.3390/su13158360>

29. Mont O., Plepys, A. (2008). Sustainable consumption progress: should we be proud or alarmed? *Journal of Cleaner Production*, 16.
30. Mróz, B. (2013). *Konsument w globalnej gospodarce. Trzy perspektywy*. Warszawa: Oficyna Wydawnicza SGH.
31. *Our Common Future* (1987). Report of the World Commission on Environment and Development. Retrieved from: <http://www.un-documents.net/our-common-future.pdf>
32. Paczka, E. (2020.). Zmiana zachowań rynkowych pokolenia Z. *Ekonomia - Wrocław Economic Review*, 26, 1.
33. *Raport EY*, www.ey.com/en_gl/corporate-responsibility/how-business-and-education-can-help-gen-z-reframe-the-future, 12.12.2023.
34. Raport Mediahub, Instytut Badawczy Pollster (2022). *Generacja Z – Rzeczywistość młodych w kontrze do utrwalonych stereotypów*, 10.01.2023.
35. Ryszawska, B. (2013). *Zielona gospodarka - teoretyczne podstawy koncepcji i pomiar jej wdrażania w Unii Europejskiej*. Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego.
36. Saniuk, S., Grabowska, S., Gajdzik, B. (2020). Personalization of Products in the Industry 4.0 Concept and Its Impact on Achieving a Higher Level of Sustainable Consumption. *Energies*, 13, 5895.
37. Schor, J.B., Craig, J.T. (2014). *Sustainable Lifestyles and the Quest for Plenitude. Case Studies of the New Economy*. Yale University Press.
38. Schor, J.B. (2014). *Debating the Sharing Economy*. Retrieved from: <http://www.greattransition.org/publication/debating-the-sharing-economy>.
39. Seyfang, G. (2009). *The New Economics of Sustainable Consumption. Seeds of Change*. New York: Palgrave Macmillan.
40. Słupik, S. (2015). Świadomy konsument energii w województwie śląskim w świetle badań ankietowych [Conscious energy consumer in the Silesian voivodship in the field of survey]. *Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach*, 232, 215-224.
41. Sobczyk, G. (2014). Zachowania konsumentów wobec nowych trendów konsumpcji – wyniki badań. *Annales Universitatis Mariae Curie-Skłodowska, sectio H – Oeconomia*, LII, 171-180.
42. Sobczyk, G. (2018). Współczesna konsumpcja – nowe trendy na polskim rynku [Contemporary consumption – new trends in the Polish market]. *Zeszyty Naukowe WSEI seria: Ekonomia*, 9(2), 87-104.
43. Spangenberg, J.H. (2014). Institutional change for strong sustainable consumption: sustainable consumption and the degrowth economy. *Sustainability: Science. Practice & Policy*, 10(1).
44. Spodarczyk, E. (2018). Gotowość konsumenta do ponoszenia kosztów odpowiedzialnej konsumpcji w świetle wyników badania [Readiness of a consumer to bearing costs of

- responsible consumption in the light of research results]. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu [Research Papers of Wrocław University of Economics]*, 516, 76-86.
45. Stolecka-Makowska, A., Wolny, R. (2018). The Idea of Car Sharing as a Manifestation of Sustainable Consumption. *Problemy Zarządzania*, 3(75), t. 1, 182-196.
46. Wilczak, A. (2019). Młodzi dorośli Polacy wobec redystrybucji dóbr używanych. *Marketing i Rynek [Journal of Marketing and Market Studies]*, 26(2), 16-30.
47. Zalega, T. (2018). Collaborative consumption in consumer behavior of Polish young people. *Journal of Economics and Management*, 33(3), 136-163.
48. Zrałek, J. (2012). Dekonsumpcja jako przejaw proekologicznych zachowań konsumentów. *Handel Wewnętrzny, maj-czerwiec, t. II*.