

GREEN SPORTS PRODUCT CONSUMPTION

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Abstract: *The escalating climate crisis over the past decades has increasingly impacted the sports sector; particularly the activities of sports equipment and sportswear manufacturing companies. Globally, companies striving to meet the growing consumer demand and expectations are causing significant environmental impact through the mass production of sports goods and apparel. This impact manifests in extensive waste generation, CO₂ emissions, the release of harmful chemicals, wastewater discharge, excessive water and energy consumption, and the relentless exploitation of natural and fossil resources. In recent years, a shift has gained momentum, aiming to promote sustainable economic and social practices, with an increasing number of sports equipment and sportswear manufacturers joining this movement. The sportswear industry has a significant impact on both social and natural environments, making it inevitable for companies to take radical steps to reduce their ecological footprint. For years, several international manufacturers have been implementing numerous sustainability initiatives, striving to adopt water- and energy-efficient, CO₂- and waste-reducing manufacturing methods and processes to minimize the environmental impact of their products. These efforts are aimed at making the world a better place for people and the planet, standing up for important social issues, and ensuring fair and ethical working conditions for their employees. The demand for green sports product consumption is gaining increasing popularity, particularly abroad, leading to noticeable transformations and developments. Consumers are increasingly favoring conscious, responsible consumption, reflected in the growing demand for clothing made from organic cotton, bio-based materials, and sustainable, recycled materials. Moreover, they are paying more attention to ensuring that the sports products they purchase are produced with minimal environmental impact and ethical manufacturing practices. Sports equipment and sportswear manufacturing companies are adapting to these changing consumer trends by offering a broader and more diverse range of eco-friendly sports products, equipment, and apparel to meet the growing interest in environmentally responsible options. The aim of this study is to examine consumer behavior and attitudes regarding the purchase of sustainably produced sports products, equipment, and apparel, using a population survey. The survey investigated consumer demands, preferences, motivations, and awareness related to green sports products, as well as the factors influencing purchasing and payment willingness and decisions for sustainably produced goods.*

Keywords: *environmental protection, consumer behavior, sports products, conscious consumption*
(JEL code: Q56, D12)

INTRODUCTION

The escalating climate crisis over the past decades has increasingly impacted the sports sector, particularly the activities of sports equipment and sportswear manufacturing companies. Globally, companies striving to meet the growing consumer demand and expectations are causing significant environmental impact through the mass production of sports goods and apparel. This impact manifests in extensive waste generation, CO₂ emissions, the release of harmful chemicals, wastewater discharge, excessive water and energy consumption, and the relentless exploitation of natural and fossil resources. Thus, the is-

sue of sustainability is one of the most prominent challenges of our time, requiring active involvement from economic, social, political, and industrial sectors in addressing it. Almost every activity related to sports is associated with environmental harm, such as the pollution caused by sports equipment and sportswear manufacturers, the construction and operation of stadiums, the organization of sports events, and the behavior of fans and consumers, among others. The relationship between sports and the environment is cyclical, often negatively affecting the natural environment, land use, air pollution, water use, energy and resource demands, carbon emissions, and waste management issues, which pose cardinal problems for urban atmospheres and

living spaces. As in every area of life, it is crucial in the sports industry to prioritize the rational and ecologically unobtrusive, productive use of raw materials and natural resources, as well as to preserve the healthy living conditions of the population and consumers (KELLISON, 2023; RÁTHONYI-ÓDOR, 2019; MAKARA and RÁTHONYI-ÓDOR, 2024). Globalization and the dynamically developing production-oriented economy have generated environmental harms that have made it urgent for economic actors to take action as soon as possible. Environmental protection is the essence of responsible corporate strategy, which should guide all economic players, including the sports sector, and within it, sports equipment and sportswear manufacturers (KIM and OH, 2020; RÁTHONYI-ÓDOR et al., 2019; TRENDAFILOVA et al., 2013).

The environmental connection points of the sports sector and the examination of the environmental aspects of sustainability are considered foundational in research, which is increasingly being addressed by international studies and literature (BAIER et al., 2020; SHIPLY, 2018; SUBIC et al., 2014). Sports equipment and sportswear manufacturing companies operate with high-volume, multi-tiered global supply chains. They constantly strive to meet sudden changes in consumer demand, resulting in high raw material and resource needs, waste and greenhouse gas emissions, and water usage, all of which contribute to some of the most harmful environmental impacts. Today, sustainable development as a systemic way of thinking has been integrated into the corporate strategies of larger, leading sports equipment and sportswear manufacturers, and it must be extended to their entire production chain. A crucial aspect of greener operations is that companies must pay increased attention to product design, rethink manufacturing processes, and collaborate closely with suppliers, enabling them to drastically reduce their ecological footprint (BAIER et al., 2020; FUNG, 2021; KIM and OH, 2020).

In recent years, a significant shift has gained momentum in promoting sustainable economic and social practices, with an increasing number of sports equipment and sportswear manufacturing companies joining this movement. The sportswear industry has a profound impact on both social and natural environments, making it essential for companies to take radical steps to reduce their ecological footprint. For several years, numerous international manufacturers have implemented sustainability initiatives, focusing on water and energy efficiency, minimizing CO₂ and waste emissions, and adopting manufacturing methods and processes that reduce the environmental impact of their products. These efforts aim to make the world a better place for people and the planet, to stand up for important social issues, and to ensure fair and ethical working conditions for their employees.

Leading international sports equipment and sportswear manufacturers make a credible effort each year to publish reports on their measures supporting sustainable development through various reports (annual reports, sustainability reports, CSR reports, environmental reports). In these publications, they also provide insights into their business activities, substantiating the effectiveness of their environmentally conscious actions with plan-vs-actual data, and regularly set goals to further reduce their environmental pollution in the

future. The green initiatives and goals of sports equipment and sportswear manufacturers generally focus on waste management, reducing water usage, wastewater treatment methods, recycling, minimizing chemical usage, and reducing carbon emissions (RÁTHONYI-ÓDOR et al., 2019).

Consumer preferences, choices, and decisions significantly influence product markets, societal operations, and environmental impact. Conscious consumer behavior involves a series of purchasing decisions where the buyer focuses on products that minimize harmful environmental effects, prioritize seasonal products from local producers, avoid goods made with plastic, and prefer items produced through more energy-efficient manufacturing methods. The demand for sustainable fashion reflects a consumer behavior pattern that seeks to reduce ecological footprints by opting for green products when purchasing clothing and accessories. This behavior not only protects the planet but also contributes to the well-being of communities and future generations (SPINDLER et al., 2023; KHAN et al., 2023).

Sustainable consumer habits are increasingly evident in the purchase of sports products. Environmentally friendly sports equipment and apparel are products that have been designed to minimize environmental harm during their manufacturing processes. These items are often made from recycled materials, produced using renewable energy sources and eco-friendly technologies, contain minimal or no plastic, and are packaged in environmentally conscious ways. The demand for green sports products is gaining popularity, particularly abroad, leading to noticeable transformations and developments. Consumers are increasingly favoring conscious and responsible behavior, with a growing number expressing future intentions to purchase such products. This trend is reflected in the rising demand for clothing made from organic cotton, bio-based materials, biop cotton, and sustainable, recycled materials. Shoppers are also more concerned with ensuring that the sports products they buy are produced with minimal environmental impact and ethical manufacturing practices, and that these products are durable and long-lasting to reduce waste generated from frequent replacements. Sports equipment and apparel manufacturers are adapting to these changing consumer trends by offering a wider and more diverse range of eco-friendly sports products, equipment, and apparel to meet the increasing consumer interest in sustainably produced items (NAM et al., 2017; NIKE, 2020; UNDER ARMOUR, 2022).

Environmentally sustainable, or "green" consumer behavior presents a significant opportunity for average individuals to contribute to reducing the negative environmental impacts generated by consumer society through their everyday decisions, aiming for a more sustainable and environmentally friendly future. Conscious consumers may commit to a brand not only because of ethical and environmental considerations but also due to trends, social pressure, and the community value associated with a brand's social responsibility. Green, conscious consumer behavior is also evident in how buyers carefully seek out sports equipment and sportswear manufacturers that clearly indicate and publicly share information about their ethical, green manufacturing processes, environmental certifications, and quality control data (NAM et al., 2017; FUCHS and HOVMANN, 2022).

MATERIALS AND METHODS

The aim of this study is to examine consumer behavior and attitudes towards purchasing sustainably produced sports products, equipment, and apparel through a public survey. The survey assessed consumer demands, preferences, motivations, and awareness related to green sports products, as well as the factors influencing purchasing and payment willingness and decisions associated with sustainably produced items.

The purpose of the questionnaire was to gather sufficient and high-quality information regarding consumers' environmentally conscious sports product purchases. The survey employed closed, multiple-choice, intensity questions using a Likert scale. The questions progressed from demographic data to those exploring occupational and sports habits, and then to questions related to sports product purchases, concluding with an individual opinion survey. The questionnaire was distributed via social media, using the so-called "snowball method." It was made available to respondents from April 20 to May 14, 2024, and a total of 241 people completed it.

Statistical analysis was performed using SPSS software and at all statistical tests, statistical significance was defined as 5%. Descriptive statistics were calculated for the demographic variables. Data normality was evaluated with a Kolgomorov–Smirnov test. Next, for normally distributed data we used parametric tests (t-test), and for non-normally distributed data we used non-parametric tests (Mann-Whitney). Pearson chi-square analysis was used to examine for significant differences in willingness to pay premium by gender. We also examined whether there are significant differences between genders in the Likert-scale statements included in the questionnaire.

RESULTS AND DISCUSSION

Demographic questions

In our research, a total of 241 individuals completed the questionnaire, which was preceded by a "pilot test" before distribution. According to the data in Table 1, women are clearly overrepresented in the sample, with their proportion being nearly twice that of men. Of the respondents, 160 (66.4%) were women, and 81 (33.6%) were men. Analyzing the distribution by age and gender ratio, we found that the 26-35 age group was the most represented, comprising 36.5% of all respondents (88 individuals), nearly a third of the sample. The smallest representation came from the 56-65 age group (10 individuals, 4.1%) and those over 65 (3 individuals, 1.2%). The second most frequent age group was 36-45 years (22.4%, 54 individuals), followed by equal representation from the 18-25 and 46-55 age groups (17.8%, 43 individuals each). Overall, it can be stated that more than half of the respondents were under the age of 35, with women being the majority in nearly every age group. The high proportion of respondents under 35 can be attributed to the frequency of time spent on social media, as younger generations tend to spend more time on such platforms and are more active in the online space.

As the next step in our research, we considered it important to assess whether the respondents have their own income. It was

Table 1. Distribution of Participants by Gender and Age Group in the Sample

Age group (Years)	Women		Men		Total	
	N	%	N	%	N	%
18-25	19	11,8%	24	29,6%	43	17,80%
26-35	61	38,1%	27	33,3%	88	36,5%
36-45	37	23,1%	17	21%	54	22,4%
46-55	31	19,4%	12	14,8%	43	17,8%
56-65	10	6,2%	0	0	10	4,1%
65 <	2	1,2%	1	1,2%	3	1,2%
Total	160	66,4%	81	33,6%	241	100%

Source: own construction based on the results of the research

revealed that 218 participants (90.5%) have their own source of income, while 23 participants (9.5%) do not. Therefore, the proportion of active earners in the sample is approximately 90%, which we consider to be a strong basis for further analysis.

Sport activities related question

Since the main goal of our research is to explore respondents' purchasing habits and trends regarding environmentally friendly sports equipment and apparel, we examined how often the participants in our sample engage in physical exercise and how many times per week they work out. This information is crucial because we assume that those who exercise regularly are more open to purchasing environmentally friendly products and are more likely to buy such items.

The results showed that most respondents exercise 1-2 times per week (78 participants, 32.4%). Unfortunately, a significant portion of respondents exercise less than once a week (22.8%, 55 participants) or do not engage in physical activity at all (11.2%, 27 participants). The finding that nearly 70% of respondents exercise 1-2 times per week or less is, in our opinion, insufficient and reflects the situation in Hungary, where nearly 60% of the adult population does not engage in sports during their free time. Additionally, 21.6% of respondents (52 participants) exercise 3-4 times per week, 6.6% (16 participants) exercise 5-6 times per week, and 5.4% (13 participants) engage in physical activity every day.

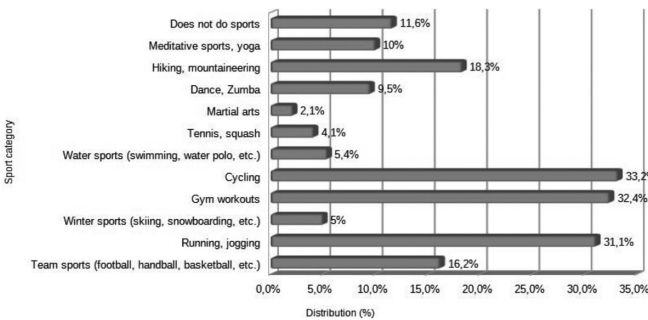
In terms of educational attainment among the sample, the largest proportion of respondents had completed a university bachelor's degree (BSc) (38.6%; 93 participants). A significant number also had a high school diploma (27%; 65 participants), while an equal proportion (16.2%; 39 participants each) had completed a vocational school or a university master's degree (MSc). The proportion of those who had completed PhD studies was minimal (0.8%; 2 participants). When examining exercise habits, we aimed to assess how much time respondents dedicate to physical activity per session. The survey results showed that respondents were nearly evenly split between those who spend 1-2 hours per session (35%) and those who spend 30-60 minutes (35%) on exercise. Meanwhile, 14.9% of respondents spent less than 30 minutes, and 10% did not exercise at all. The

proportion of those who engaged in physical activity for more than 2 hours per session was very low (5.8%).

When creating questions related to sports activities, we considered it important to ask what type of sports respondents engage in, as illustrated in Figure 1. The diagram clearly shows that the most popular activities are cycling (33.2%; 80 participants), gym workouts (32.4%; 78 participants), running or jogging (31.1%; 75 participants), and team sports (e.g., football, basketball, handball, etc.) (16.2%; 39 participants). Many respondents also enjoy dancing or Zumba (9.5%; 23 participants) and spend their leisure time hiking or mountain climbing (18.3%; 44 participants). The range of active leisure activities is almost endless. People have numerous options for how to spend their limited free time. For this reason, it is not easy for sports service providers to achieve the goal of attracting the maximum number of customers and securing their loyalty.

The vast array of options is accompanied by constantly changing consumer demands, which sports equipment and apparel manufacturers strive to meet and adapt to. A marketing strategy linked to an eco-friendly, sustainably produced sports product can often capture consumers' attention, making them feel good about their purchase, as they may feel they are contributing to a better planet.

Figure 1. Participants' Choice of Sports

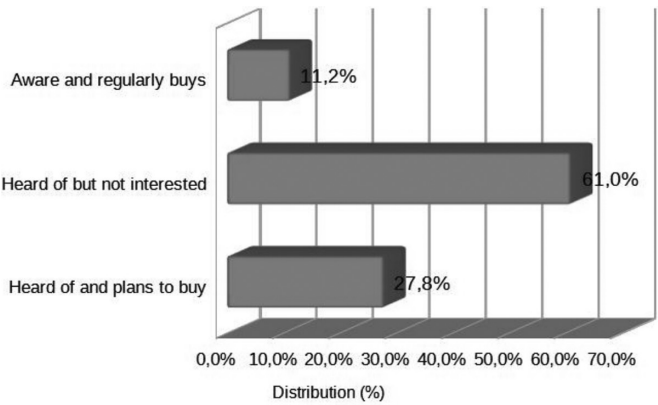


Source: own construction based on the results of the research

Questions related to the purchase of sports equipment and sportswear

At the next stage of our survey on sports equipment and sportswear purchases, we focused on the locations where these purchases are made. Different habits are typical when buying clothing items, groceries, durable consumer goods, and technical devices. Based on the information gathered, it was revealed that most respondents (82.6%; 199 people) usually purchase sports equipment and sportswear in sports stores and sports outlets. This is likely due to the fact that when buying such items (sportswear, sports shoes, etc.), it is important to ensure the proper size and quality, which can most often and best be checked and tried on in person by the buyer. Additionally, many respondents (51%; 123 people) indicated that they typically purchase such items through online shops, which is also not surprising, as we live in the age of the internet, and in many cases, this is the fastest and most convenient solution for consumers. Sports equipment and sportswear manufacturers often

Figure 2. Knowledge of eco-friendly sports equipment

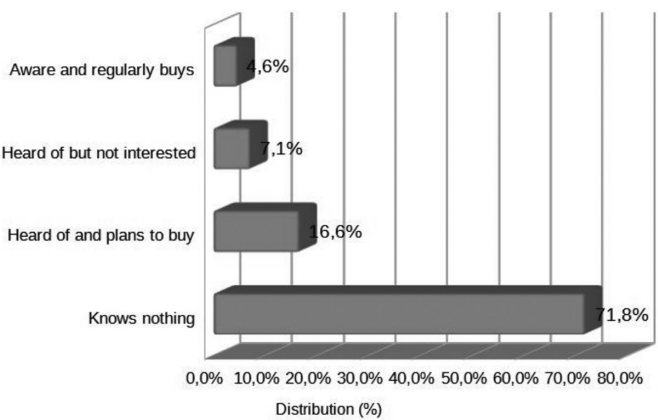


Source: own construction based on the results of the research

present their product ranges on their own websites, where direct filters can be applied, and browsers can often find special deals as well. In the spirit of sustainability, it is important that unwanted and unused clothing and sports equipment are reintroduced into circulation rather than ending up in waste containers. In total, about 11% of respondents indicated that they are happy to buy used items, for example, on social media platforms such as Marketplace (4.6%) or on various online marketplaces such as Vinted, Jófogás, and Vatera (5.8%).

One of the key steps in our research was to map how familiar our respondents are with the concept of environmentally friendly manufactured sports equipment and sportswear, and we also wanted to assess how well they know the green sports products of domestic sports equipment manufacturers. The results of these questions are illustrated in Figures 2 and 3. As shown in the figures, the majority of respondents (61%) have heard of them but do not plan to purchase such products in the near future, and 71.8% have no information about domestic companies that are part of the sustainable sports industry. Only 27.8% indicated on a national level and 16.6% on an international level that they had heard of such products and plan to

Figure 3. Awareness of eco-friendly products by Hungarian sports manufacturers



Source: own construction based on the results of the research

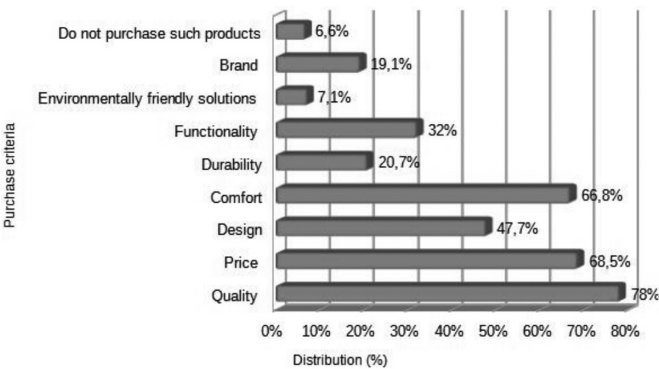
try them in the near future. Very few respondents consciously select their sportswear; 11.2% answered that they only buy such products, while in the case of domestic sports equipment manufacturers, this number was even lower (4.6%).

Sustainable fashion is more prominently represented on an international level among sports equipment manufacturers. Major multinational companies have recognized for years that urgent steps must be taken to mitigate the damage caused by climate change. In a brand preference survey linked to international sports equipment and sportswear manufacturers, it was revealed that 37.3% of respondents prefer Nike, 22.4% prefer Adidas, 7.1% prefer Under Armour, 6.2% prefer Puma, 3.7% prefer Heavy Tools, and 2.1% prefer New Balance and Reebok products. We found it interesting to assess which sports equipment manufacturers' products respondents consider the most environmentally friendly. The results show that the majority pointed to Nike (15.4%), Adidas (11.2%), Under Armour (4.6%), and Puma (3.3%), which closely mirrors the brand preference results.

It is not surprising that international sports equipment and sportswear manufacturers' sustainable initiatives are better known, as these companies strive to publish reports on their sustainability measures annually, informing consumers, economic players, and competitors about their operational status, goals, and achievements. For instance, Adidas, Nike, and Under Armour each have established and detailed environmental strategies. They emphasize the use of renewable energy sources, water conservation efforts, recycling, and waste management methods, as well as responsible material usage and procurement. All three companies aim to reduce the environmental impact of their partners and suppliers. They are aware that immediate actions must be taken for a sustainable future and climate neutrality. Their reports detail the outcomes of their sustainability efforts with varying levels of specificity, including planned vs. actual data, and outline their short- and long-term goals for more environmentally conscious operations (MAKARA, 2023).

Figure 4 clearly reflects the results of the previous questions, showing that when it comes to purchasing sports equipment and sportswear, the respondents almost did not consider environmentally friendly solutions and sustainability factors important

Figure 4. Respondents' purchasing considerations related to sports equipment and sportswear



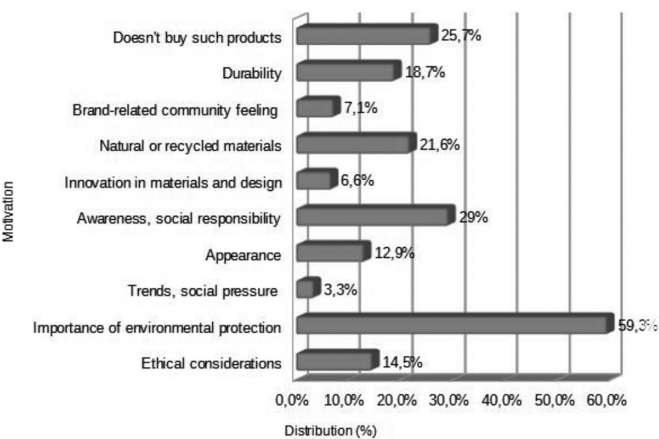
Source: own construction based on the results of the research

(7.1%). When acquiring sports products, the respondents primarily prefer quality (78%), price (68.5%), comfort (66.8%), as well as appearance (47.7%) and functionality (32%). A surprising result is that brand loyalty does not appear as strongly in the findings, as only 19.1% of respondents indicated this as a factor.

Questions on Awareness and Purchasing Habits Regarding Environmentally Friendly Sports Equipment and Sportswear

In Figure 5, we illustrated what motivates respondents to purchase environmentally friendly sports equipment or sportswear. The majority of respondents (59.3%) indicated that they purchase such products primarily because of the importance of environmental protection. Additionally, they value consciousness and social responsibility (29%) as well as the presence of natural or recycled materials (21.6%). From this, we can infer that the respondents understand the benefits associated with green products and the importance of environmental protection. Furthermore, 14.5% indicated that they consider ethical factors, while 18.7% value durability, and 12.9% also consider appearance important.

Figure 5. Motivations for Purchasing Eco-Friendly Sports Products



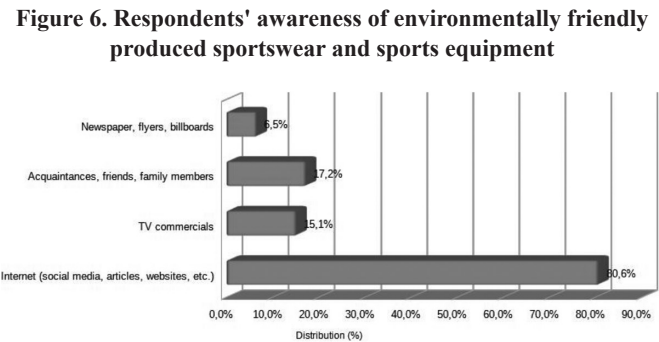
Source: own construction based on the results of the research

A significant proportion of the survey participants also reported that they rarely (56%; 135 people) or never (39.4%; 95 people) purchase environmentally friendly sports equipment and sportswear. Only 4.1% (10 people) indicated that they regularly do so, and just 0.4% (1 person) stated that they exclusively prefer such products, which unfortunately cannot be considered a good result.

Next, we considered it important to ask what information the respondents need to ensure and trust that a product has been manufactured in an environmentally friendly manner. This is particularly interesting to examine because, in today's fast-paced world flooded with information, it is extremely difficult to make responsible, conscious decisions, especially concerning purchasing habits. In the sample, 68.2% (163 people) indicated that they require an eco-friendly, sustainability certification, while detailed knowledge of the production

process is important for 35.1% (84 people). Additionally, various quality control data provide valuable information, which 37.2% (89 people) consider important. Today's consumer society continuously churns out newer and newer products and services, and the activities of sports equipment manufacturers are no exception. Sustainable corporate behavior is increasingly leaning toward green product marketing. Gaining consumer trust is not simple, as they often encounter misleading and unfair marketing strategies, known as the "greenwashing" phenomenon. To regain credibility, manufacturers have the opportunity to apply the above-mentioned methods to win consumer trust and assist them in making responsible purchasing decisions (ADAMKIEWICZ et al. 2022).

Figure 6 shows how the participants in the sample learn about environmentally friendly sportswear and sports equipment. The most significant number and proportion are associated with online sources (80.6%), including various social media platforms (TikTok, Instagram, Facebook, etc.), articles, and websites. This is because information flows fastest on the internet, and our smart devices are with us almost all the time. As a result, manufacturers spend a large portion of their marketing budgets on online advertisements, influencer marketing, and direct marketing. The other options pale in comparison to the dominant internet, with 17.2% of respondents obtaining such information from acquaintances, friends, or family members, 15.1% from TV commercials, and 6.5% from newspapers, flyers, or possibly billboards.



Source: own construction based on the results of the research

Willingness to Pay

In the following question, we sought to determine whether the respondents are willing to pay more when purchasing sports equipment or sportswear if they know that these products were manufactured in an environmentally friendly manner. Overall, it can be said that more than half of the respondents, 61% (147 people), are willing to pay more, while 39% (94 people) are not willing to spend extra on green sports products.

When examining the relationship between gender and willingness to pay, we conducted a Pearson Chi-Square test, the results of which are illustrated in Table 2. The test aimed to determine whether men or women are willing to pay more for sports equipment or sportswear if they know that these products were manufactured in an environmentally friendly manner. As can be seen from the Likert scale questions later on, women

generally place a higher value on environmentally friendly solutions in sports products, but this difference does not manifest in their willingness to pay. According to the test results, there is no significant difference between genders in terms of willingness to pay extra (Pearson Chi-Square= 3.069, p= 0.546).

Table 2. Willingness to Pay Premium by Gender

	Up to 10%	Up to 20%	Up to 30%	More than 30%	I am not willing to pay more	Total
Female						
N	34	13	3	1	30	81
%	42,0%	16,0%	3,7%	1,2%	37%	100%
Percentage of Column (%)	33%	25,5%	50%	33,3%	38,5%	33,6%
Standardized Residual	-0,1	-1	0,7	0	0,7	
Male						
N	69	38	3	2	48	160
%	43,1%	23,8%	1,9%	1,3%	30%	100%
Percentage of Column (%)	67%	74,5%	50%	66,7%	61,5%	66,4%
Standardized Residual	0,1	0,7	-0,5	0	-0,5	
Total						241
N	103	51	6	3	78	241
%	42,7%	21,2%	2,5%	1,2%	32,4%	100%
Percentage of Column (%)	100%	100%	100%	100%	100%	100%

Chi-Square Test Results

Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3,07	4
Likelihood Ratio	3,08	4
Number of Valid Cases	241	

Source: own construction based on the results of the research

In the final phase of our research, we focused on the 16 Likert-scale surveys included in the questionnaire. Our goal was to assess respondents' opinions regarding their awareness and consumption of green, environmentally friendly sports products, their knowledge of the sustainable efforts of international or domestic sports equipment and sportswear manufacturers, as well as their individual environmentally conscious attitudes and behaviors. We used a paired 4-point scale (1: Strongly disagree, 4: Strongly agree) to minimize the likelihood of responses clustering around the midpoint. The following statements were presented to the participants in the questionnaire:

- 1. It is important to me that the sports equipment or sportswear I purchase is produced in an environmentally friendly manner.

2. I am satisfied with the current selection of sports equipment and sportswear produced in an environmentally friendly manner.
3. I am happy to buy products from domestic sports equipment manufacturers.
4. I am satisfied with the environmentally friendly sports equipment and sportswear produced by domestic sports equipment manufacturers.
5. I am satisfied with the variety of environmentally friendly sports equipment and sportswear offered by domestic sports equipment manufacturers.
6. I am satisfied with the availability of environmentally friendly sports equipment and sportswear in online shops and retail stores.
7. Overall, I am satisfied with the prices of environmentally friendly sports equipment and sportswear.
8. When purchasing sports equipment or sportswear, it is important to me that the products are recyclable or made from recycled materials.
9. I trust manufacturers when they claim that their products are produced in an environmentally friendly manner.
10. With my purchase, I aim to support sports equipment and sportswear manufacturers that adhere to sustainability and environmental protection principles.
11. I am a conscious, environmentally friendly shopper.
12. When buying sports equipment or sportswear, I am brand loyal.
13. My consumption and purchasing habits are influenced by my commitment to environmental protection.
14. It is important to me that the sports equipment and sportswear I purchase are environmentally friendly and have sustainability certifications.
15. I am willing to make compromises in order to buy sports equipment and sportswear produced in a sustainable, environmentally friendly manner.
16. I generally shape my purchasing habits by considering the environmental impact I generate.

We examined whether there are significant differences between genders in the Likert-scale statements included in the questionnaire. As an initial step, we conducted a normality test. For normally distributed data we used parametric tests (t-test), and for non-normally distributed data we used non-parametric tests (Mann-Whitney). We used SPSS software to analyze significant correlations.

Based on the calculations mentioned above, Table 3 shows that significant differences were found in the following statements:

- It is important to me that the sports equipment or sportswear I purchase is produced in an environmentally friendly manner. (Q1; Mann-Whitney, 0.005)
- I am a conscious, environmentally friendly shopper. (Q10; Mann-Whitney, 0.002)
- I generally shape my purchasing habits by considering the environmental impact I generate. (Q15; Mann-Whitney, 0.006)

- I am happy to buy products from domestic sports equipment manufacturers. (Q3; t-test 0.024)
- It is important to me when buying sports equipment or sportswear that the products are recyclable or made from recycled materials. (Q8; t-test 0.003)

Table 3. Testing significant differences between genders in Likert-scale statements formulated in the questionnaire

Q	N; W/M	K-S Asymp. Sig. (2-tailed)	M-W (U) Asymp. Sig. (2-tailed)	Mean	Std. Deviation	Levene's Test Sig.	Two- Sided p
Q1	79	0,011	0,005	2,24	0,909	0,293	0,008
	152			2,59	0,931		0,007
Q3	79	0,261	0,023	2,25	1,006	0,589	0,024
	150			2,57	1,012		0,024
Q8	79	0,087	0,006	2,19	0,833	0,006	0,005
	149			2,56	0,975		0,003
Q11	79	0,046	0,002	2,06	0,896	0,004	0,002
	149			2,50	1,018		0,001
Q16	78	0,020	0,006	2,18	0,785	0,00	0,005
	150			2,55	1,001		0,003

Source: own construction based on the results of the research

The aim of our research is to examine how the consumers we surveyed behave and how interested they are in purchasing sustainably produced sports products, sports equipment, and sportswear. Analyzing the demographic data, we found that the number of female respondents in our sample was almost twice as high (66.4%) as the number of male respondents. The majority of respondents were aged between 26-35 (36.5%) and 36-45 (22.4%), with 90% having their own income. Most of the respondents were women under the age of 35, which we attribute to the younger generation's higher use of social media and greater participation in online surveys.

Regarding questions on the frequency of sports activities, our results reflect the situation in Hungary, where nearly 60% of the adult population does not engage in sports in their leisure time. In our case, more than two-thirds of the respondents exercise once or twice a week or even less frequently. The respondents mostly chose cycling, gym workouts, running, and team sports for their leisure activities, but the diversity of responses suggests that there is a wide range of products offered by sports equipment and sportswear manufacturers. This represents an ideal opportunity for these companies to highlight the importance of minimizing environmental damage through their products.

When it comes to purchasing sports equipment and sportswear, we observed that a large majority of respondents (82.6%) usually buy sports goods from sports stores, sports chains, and online shops (51%), while only a few (11%) contribute to the reuse of used or unwanted sports products.

We found it important to examine what motivates the respondents to buy environmentally friendly sports equipment or sportswear. The majority of respondents (59.3%) indicated

that they primarily buy such products because of the importance of environmental protection, and they value awareness and social responsibility. However, when it comes to purchasing habits for sports equipment and sportswear, respondents generally did not consider environmentally friendly solutions or sustainability factors to be important. Instead, they prioritized quality, price, and comfort. While 67.6% of respondents were theoretically willing to pay more for environmentally friendly products, a contradictory finding was that a significant majority (95.4%) rarely or never purchase such products.

From these results, we conclude that environmental awareness — as a theoretical category — does not yet translate into environmentally conscious behavior or real actions, as seen in the infrequent actual purchases of environmentally friendly products.

We also sought to gather respondents' opinions on their awareness and consumption of green, eco-friendly sports products, their knowledge of the sustainability efforts of international or domestic sports equipment and sportswear manufacturers, as well as their individual attitudes and behaviors toward environmental awareness. An interesting finding from the Likert scale survey was that significant differences were primarily noted in the responses from women, indicating that women place greater importance on sustainable and eco-friendly purchasing practices and are more conscious consumers. They also show a stronger interest in green sports products and sportswear. Female respondents further emphasized the importance of sports products being made from recycled materials and produced in an environmentally friendly manner. It was also more characteristic of female respondents that they were more inclined to buy products from domestic sports manufacturers, identified themselves as conscious, environmentally friendly consumers, and generally shaped their purchasing habits by considering environmental impacts.

Nowadays, climate change and sustainability-related issues pose an increasingly significant threat, and these problems are evident to many people. However, there is widespread agreement that current measures and actions to address these challenges are insufficient. The current consumer society produces a large amount of byproducts that contribute to environmental damage. Therefore, it is crucial to provide consumers with accurate and thorough information about environmental problems and climate change. Consumers can significantly influence the planet's ecosystem through their everyday activities, purchasing habits, and preferences. Manufacturers and retailers have an important role in deepening environmental awareness among consumers and sparking their interest in these topics in a way that translates into actual behavior change.

In one phase of our research, we found that consumers primarily learn about environmentally friendly sportswear and sports equipment through the internet (80.6%). For this reason, sports equipment and sportswear companies should advertise their sustainable products on these platforms (TikTok, Instagram, Facebook, etc.), where information flows fastest. The activity of sports manufacturers in this area is crucial, given their product range that attracts large audiences, thereby influencing consumers during the purchasing process.

Sports manufacturers can encourage a shift toward a more responsible, conscious, and environmentally friendly lifestyle through ethical partnerships, the use of renewable energy sources, the introduction of manufacturing processes that minimize waste and emissions, the use of recycled and chemical-free materials, and environmental protection programs. These steps are necessary because many people are not aware of how they can contribute to a greener future. Our research revealed that although the majority of respondents (61%) have heard of eco-friendly sports products, they do not plan to purchase them in the near future.

In our view, consumer education about eco-friendly products by sports manufacturers could be beneficial. Our research showed that 68.2% of respondents demand environmental and sustainability certifications, while 35.1% desire knowledge of detailed manufacturing processes. By providing this information, sports manufacturers can reduce consumer uncertainty and help them make more responsible, conscious decisions.

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