

THE INFLUENCE OF THE PRODUCTION AND CONSUMPTION PROCESS OF FASHIONABLE GOODS ON THE ECOLOGICAL SITUATION IN THE WORLD

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Abstract. *The process of creating clothes requires close cooperation between different industries, which greatly complicates the perfect determination of the scale of the impact of the fashion industry on the ecology of our planet. The work contains the results of the study of the ecological situation in the world under the influence of light industry enterprises reveals the possibility of greening the production process and the role of the consumer in the fashion industry.*

Key words: *ecology, fashion industry, carbon emissions, consumption, fashion.*

Introduction

The concepts of "fashion" and "ecology" are now going hand in hand. Over the years of popularization of the ecological fashion in the world and in Ukraine, the vocabulary of each consumer has significantly expanded and enriched with such terms as: sustainable fashion, slow and fast fashion, smart consumption and others. The 3R rule, which stands for Reduce, Reuse, Recycle, has become widespread. People began to be more responsible in their purchases and towards goods. Scientists and marketing experts say that fashion takes second place, after oil production, in terms of environmental pollution. This fact is still not officially confirmed. The main purposes of the work were to analyze the negative impact of the fashion industry on the ecology of our planet and find out how many clothes a person needs to feel comfortable.

Production process

An important issue is the analysis of the impact of the fashion industry on the environmental situation in the world. Scientists and researchers faced the issue of what is called the question of "transparency". That is quite a small number of brands that are holding the assets of their own factories and fully control the production process. In an interview, environmental scientist Linda Greer said: "There are still really few brands who know where their stuff comes from in the supply chain and even fewer of them have get in contact with their suppliers to reduce their carbon footprint. A lot of brands still don't know where their fabric comes from or where the materials from which the fabric is made come from." [1].

First of all, the consumer goods industry harms the environment by carbon emissions into the atmosphere caused by the clothing manufacturing. During the period from 2017 to 2021 many consulting companies and organizations conducted research and reported on the extent and rate of environmental pollution by the fashion industry. In 2017, the Global Fashion Agenda presented its first studying results with a 4.8% of global carbon emissions per year. Subsequently, in 2018, the consulting company Quantis and Climate Works released a report claiming that clothing and footwear together are responsible for 8% of global carbon emissions. However, when Quantis was asked to provide a full report on how they came to this conclusion, as 8% is much higher than last year's 5%, according to experts, they ceded. Some journalists and publishers still claim that the fashion industry hits on 10% of global carbon emissions, attributing this to the United Nations. In August 2020, the consulting company McKinsey merged with the Global Fashion Agenda and stated that the fashion industry hits on 4% of global greenhouse gas emissions. At the end of 2021, the Institute of World

Resources and the Institute of Clothing Impact together released a new report in which the contribution of fashion is 2% of global emissions [2].

So, as mentioned above, carbon emissions caused by the fashion industry may vary from 2% to 10%, which cannot indicate the accuracy and reliability of the data. Yes, there are carbon emissions, but fashion is still in a lower spot than other industries, including transport (11.9%), household electricity (10.9%) and tourism (8%) [3].

Consumption process

Only one problem was highlighted above - the greening of the production process. The consumer has a significant impact on the ecological state of the planet as a whole. An interesting question: "How does the consumer take care of clothes, how often does he wash them, dry them, do he throw away old clothes, or does he take them to commission shops?" This is all important and can be changed by beginning from yourself.

Fashion is money, it is a business, both business and sustainability have never got along together for the benefit of both parties. The investor, owner, director of the company will never want to lose their money, or reduce production and earn less. For consumers who are worried about the future of our planet, the easiest thing to do in the first place is to buy less goods. We conducted a survey in the popular Telegram messenger among 250 female students aged 18 to 24 with the following questions: 1 - "How many clothes are in your wardrobe?"; 2 - "How often do you buy clothes?"; 3 - "How many pairs of jeans are in your wardrobe?"; 4 - "What is missing in your wardrobe?". Having received answers to the questions, the diagrams presented in fig. 1 a - fig. 4 a, a have been created, .

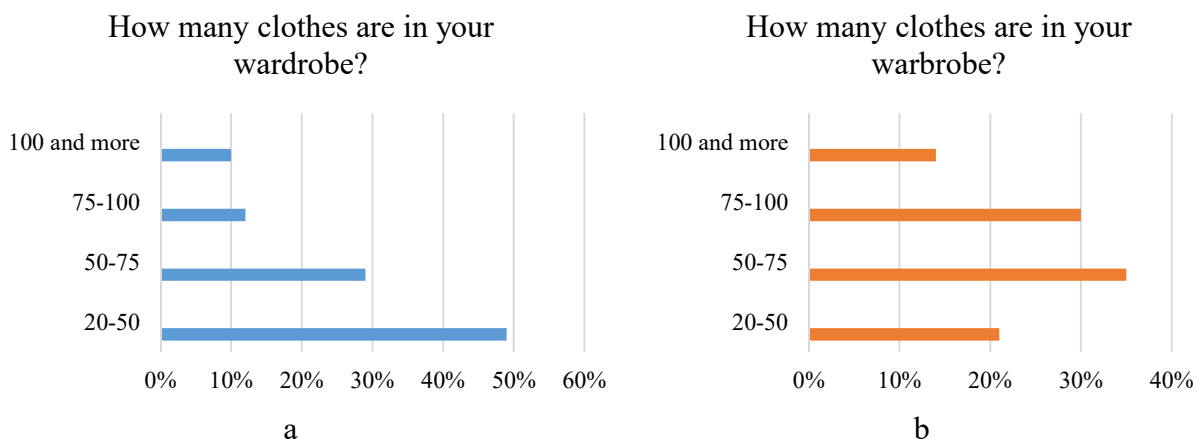


Figure 1. The results of the answer to the first question according to the survey:
a - Ukrainian consumers; b - American consumers

For comparison, we researched the data of the American publications "LifestyleFifty" [4] and "ClosetMaid" [5] (Fig. 1, b - Fig. 4, b). According to the answers to the first question, you can see that the average American has a larger wardrobe. According to a survey conducted by "ClosetMaid", the American has an average of 103 items of clothing in her wardrobe.

Behind this is the life cycle of things, because clothes need regular washing, drying, and all these are microfiber emissions into the waters of the world's oceans, 500 tons (or 50 billion plastic bottles) each year [6]. In addition, you should choose products from brands that care about the environment of the planet and officially confirm it. Stand.earth website features brands that are cost-effective in implementing renewable energy sources in their supply chain, advances in the transition from fossil fuel to low-carbon materials, and measures to reduce fossil fuel pollution from shipping [7].

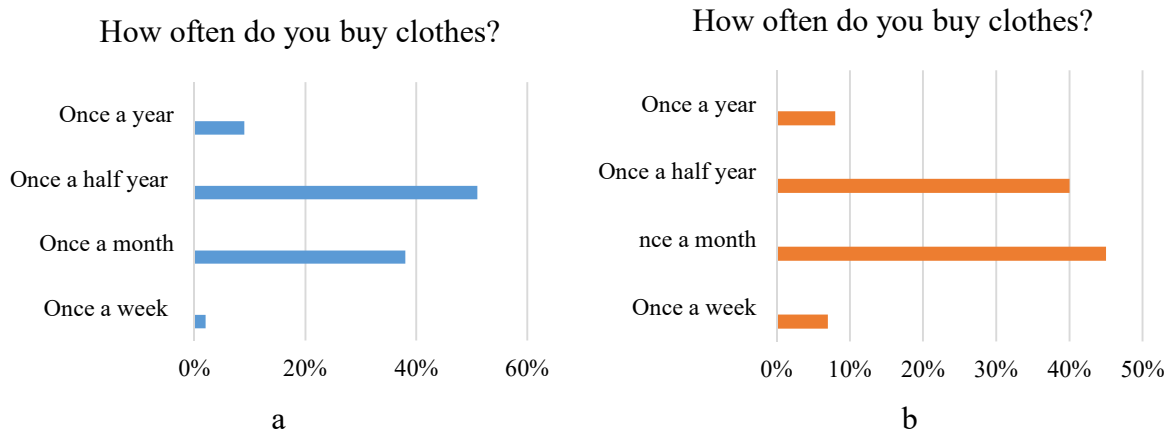


Figure 2. The results of the answer to the second question according to the survey: a - Ukrainian consumers; b - American consumers [8]

According to a survey conducted in Ukraine, the average Ukrainian allows herself to buy a new item of clothing every six months. Which is a good indicator in terms of conscious attitude to the consumption of fashionable goods. Additionally clothes can be bought in vintage stores or second-hand shops, you can reduce the negative impact on the ecology of the planet.

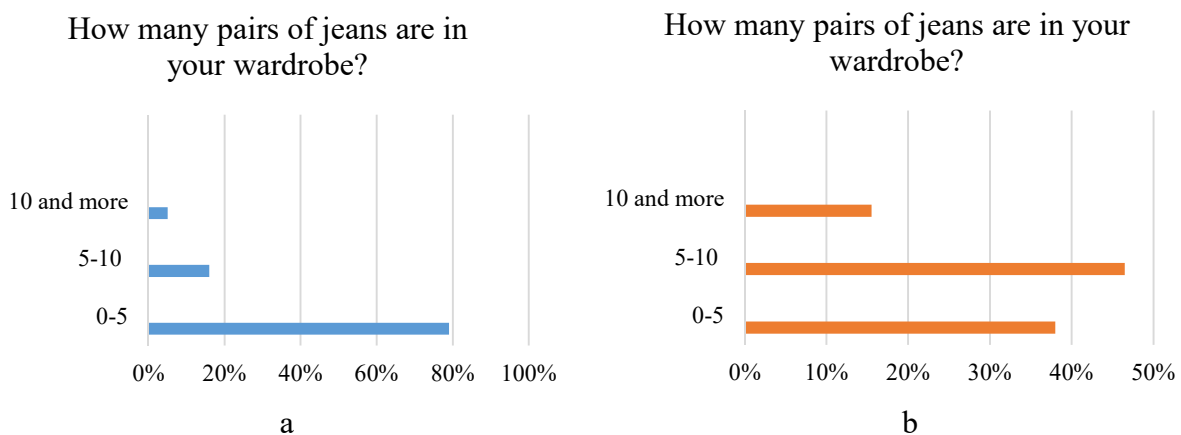


Figure 3. The results of the answer to the third question according to the survey: a - Ukrainian consumers; b - American consumers

The next question was included in the survey because jeans are the most popular item of clothing for every woman, regardless of their style. The data with the following results: on average, every American woman has 7 pairs of jeans, Ukrainian - 4. The production of one new pair of jeans takes an average of 8 thousand liters of water [9], also the washing process with different chemicals to create interesting effects on fabric and we will get a lot of emissions into the ocean. But there is an alternative, today both in Ukraine and other countries there are brands that use the method of upcycling, is creating a new thing from the old. And for the first time it was practiced only on jeans, but now you can completely make a look out of things that were given a second life.

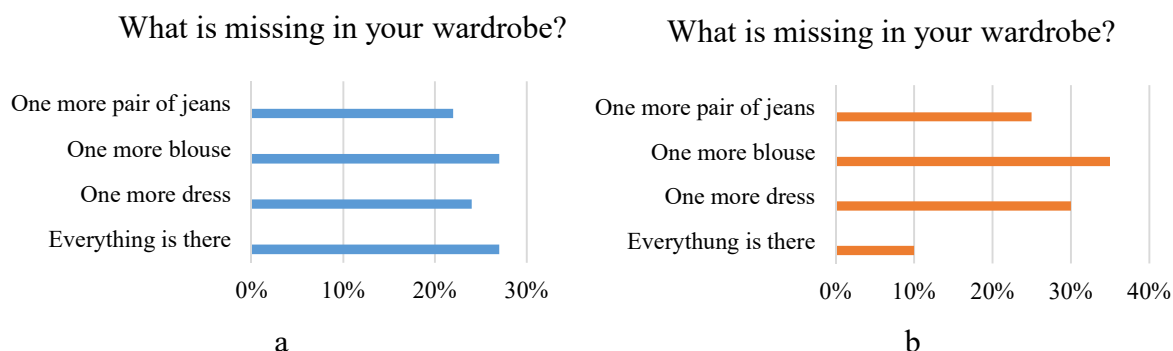


Figure 4. The results of the answer to the fourth question according to the survey:
a - Ukrainian consumers; b - American consumers

The answers of Ukrainians to the last question separated, what is displayed on the diagram. Almost every woman lacks an item of clothing in her wardrobe. So, after conducting a survey in Ukraine and comparing its results with data from the United States, we can conclude that the average Ukrainian woman spends less on a new wardrobe, but still replenishes it from time to time.

Conclusions

After analyzing these two issues, I would like to note that the problem of environmental pollution by the fashion industry is currently sensitive in the world, but sometimes it is exaggerated by the media and it is impossible to see a clear picture. The relationship between the production process and the process of clothing consumption, and its impact on the environmental situation is shown. And if the consumer cannot influence the initial stage of production in any way, it is his right to buy a new item of clothing or not.

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