

From Cradle to Grave: Apparel Product Life Cycle

Nicole Schnabel
Kyra Rogers
Dr. Mourad Krifa

Abstract

There are many factors that go into the apparel life cycle and both manufacturers and consumers contribute to the effects that the apparel industry has on the environment. In order to strike change and better the environmental impacts from the apparel industry it is important to study what is directly affecting the environment and who has a larger impact, the consumers or manufacturers? Manufacturers have a large part due to their large facilities and mass amounts of products they are creating every day, but also once the products are purchased by consumers every small act is multiplied by millions. Laundry habits are a prime example for the consumers behavior based on the fact that millions of people are washing clothing every day, using energy and harsh chemicals. They also disposed of clothing and produce mass amounts of non-compostable waste. The research conducted displays many ways that both manufacturers and consumers need to do their part to better the apparel life cycle and create a more circular system.

Objectives

The purpose of this research is to investigate consumer awareness of their impact on the environmental footprint of the apparel life cycle through care for their clothing every day, and disposal. There are three important questions that we plan to answer during this research:

- ❖ How does the industry influence the amount of waste and pollutants put out into the world?
- ❖ How do consumers dispose of their products, and what effects does this have?
- ❖ When consumers purchase products, how does their care and laundering techniques affect the planet?

Background/Literature

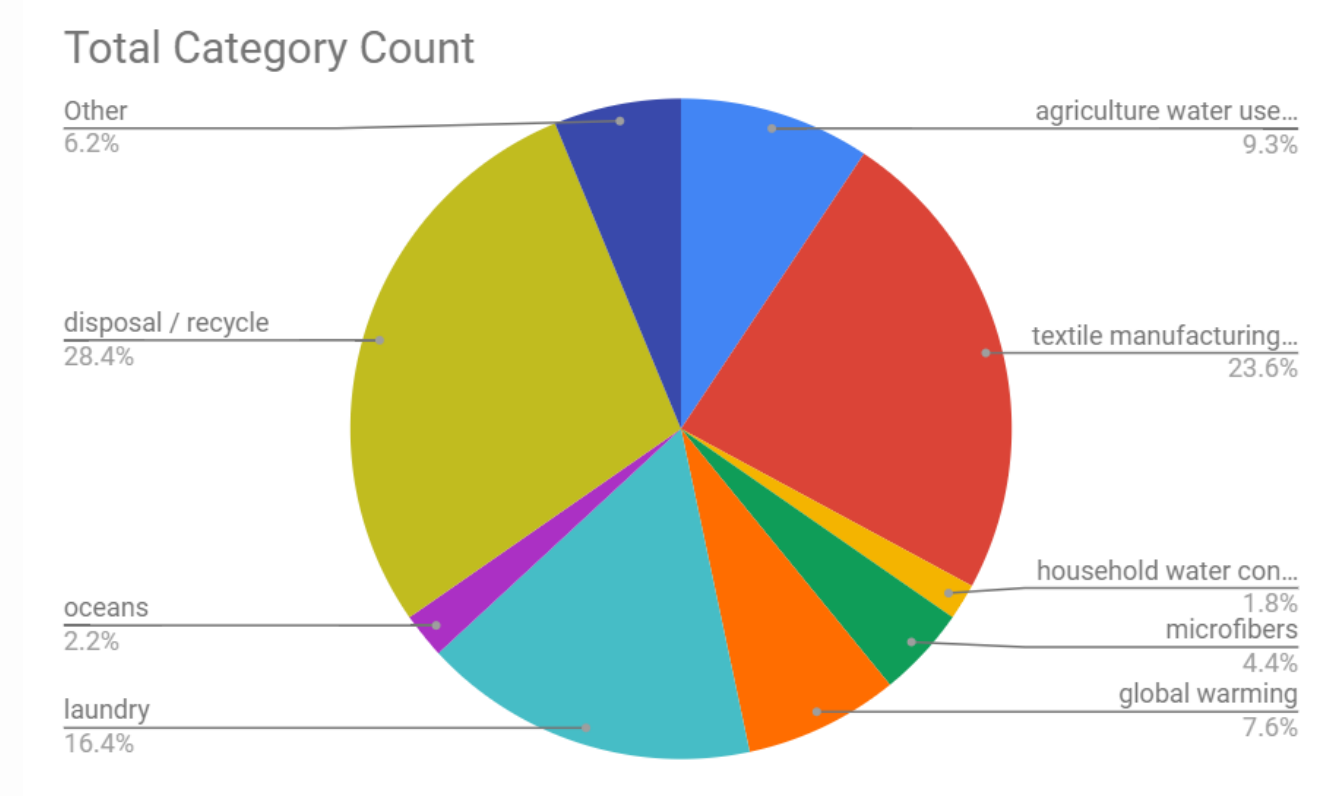
The problem in which we are interested is the apparel life cycle and the impacts consumers have. These impacts are crucial because they affect the environment with consumer disposal and care, product manufacturing, and product distribution. The apparel life cycle consists of the fulfillment of products, starting as a raw material and finally ending with disposal or recycling. The impacts made throughout the life cycle of products can be altered with sustainable practices, and positive environmental impact. The understanding of consumers knowledge on these various impacts is valuable. Consumers knowledge begins with informing customers on the apparel lifecycle and the choices they make to make for a clearer future.

Methods

- Content Analysis:
- ❖ Using scholarly research we looked into consumers responsibility in the apparel life cycle.
 - ❖ In order to learn more from consumers we used youtube to get personal comments from consumers.
 - ❖ 230 comments were collected from consumers in regards to their knowledge on pollution in the fashion industry, chemicals that are used in laundering their clothing, and energy waste.
 - ❖ There were positive, negative, and neutral comments about the process and showed that not all consumers agree on their impacts in the apparel life cycle.
- Survey:
- ❖ The snowball sampling method was used to receive 100 survey responses.
 - ❖ The survey examined purchasing behaviors of consumers and how educated they are about the apparel life cycle.

Results

As shown in the chart to the right there are many categories that fit within the apparel life cycle. As clearly displayed, there is a large amount of content dealing with textile manufacturing, laundry, and disposal/recycling. Being that these are the most prominent stages of the apparel life cycle, consumers are speaking out about their thoughts and concerns on several media platforms. The most prominent topic was the disposal and recycling process, which went to answer the



question of how consumers dispose of their apparel and how they feel about the recycling process. Consumers overall voiced that they are acting to dispose of their clothing more frequently by reproducing new garments and donating.

As shown in figure 1.1 consumers are concerned primarily about the price of their products, the quality, and the material it is made of. In figure 1.2 there is evidence that consumers are not as educated on how their clothing affects the environment. According to our survey, consumers believe that making the apparel, consumer disposal, and fiber manufacturing are the worst factors on the environment.

Figure 1.1

- Product Price
- Product Quality
- Product Manufacturing Process
- Where the Product is Made
- What Material the Product is Made of

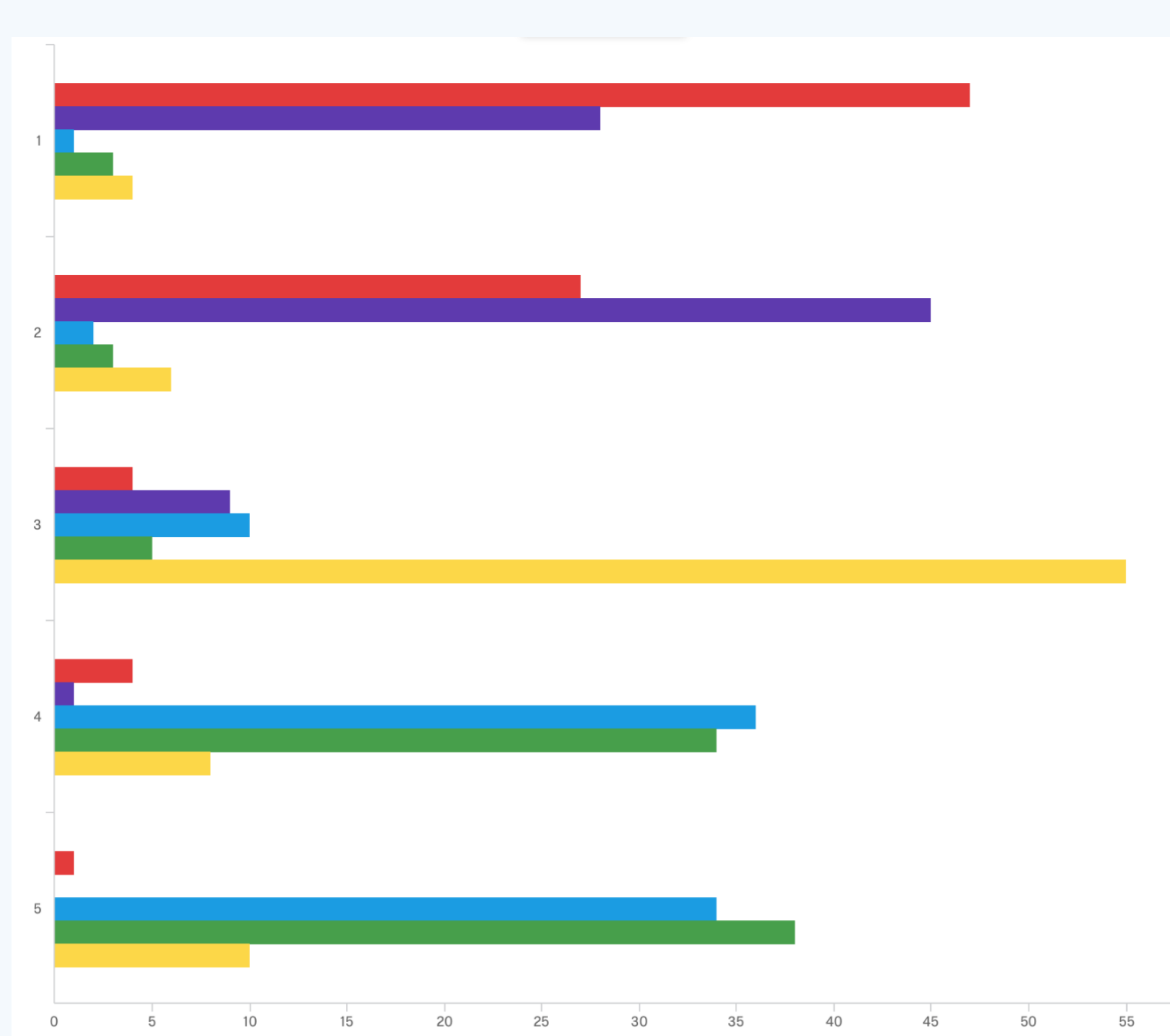
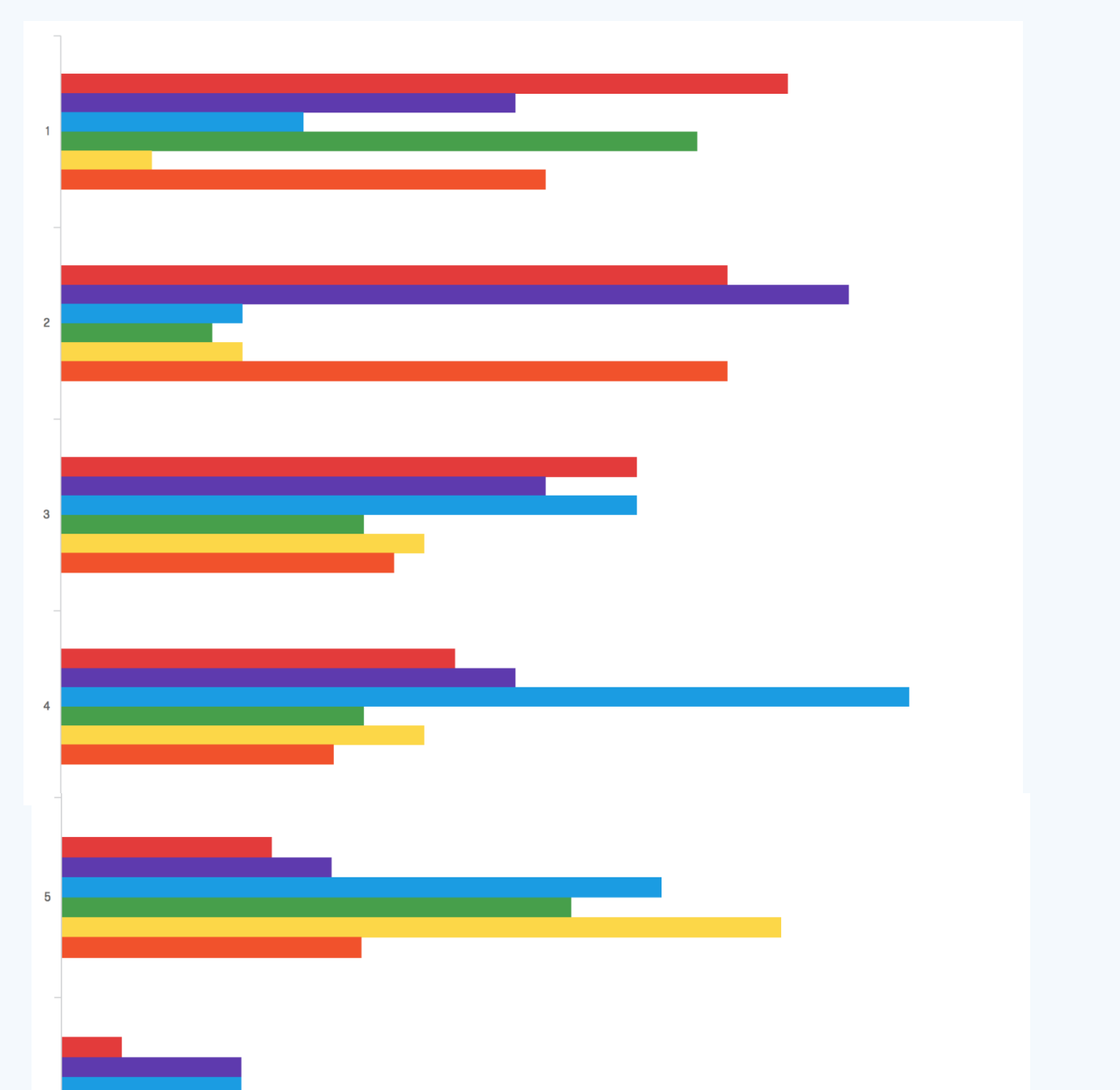


Figure 1.2

- Apparel making
- Consumer Disposal
- Fiber Manufacturing
- Consumer Care (washing & drying)
- Product Distribution
- Manufacturing Disposal



Discussion

Based on the results presented in the survey, we collected that the overall factor that is most important to consumers is price and quality. This implies that consumers are unaware of where products are made, and the materials in which products are made of.

The next standpoint we gathered from our results is the importance of environmental impact and consumers knowledge on the effects various topics make. We collected that consumers are most aware of apparel making and consumer disposal, and least aware of the impact they personally have in regards to consumer care.

Summary Conclusion

After continuous research, we found that consumers are not fully aware of the impacts they have within the apparel life cycle. Consumers are not mindful of the role they play and their effects on the environment, through consumer disposal, laundering techniques, and manufacturing impacts. Parallel with the literature, we found that consumers are attempting to find new ways to recycle, reuse, and adopt various practices to become for eco friendly. Various research showed that as some consumers are adopting new practices, others are not. Some consumers are fully informed of the impact they have, and they changes they could make as well. This brings us to the recommendations we discovered. It is valuable to inform consumers and keep them aware.

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