ISSN: 2165-8064

Open Access

Increasing Textile Circulation Consequences and Requirements

Maxwell Easte*

Department of Textile Science and Technology, University of Alabama, Tuscaloosa, USA

Abstract

The increasing circulation of textiles represents a transformative shift in the textile industry, driven by a growing recognition of the environmental impact of fast fashion and the need for more sustainable consumption patterns. As the industry adopts a circular economy approach, where textiles are designed, produced, used, and recycled in a closed loop, several consequences and requirements emerge. One consequence of increasing textile circulation is the potential reduction of environmental strain associated with textile production. By extending the lifespan of textiles through reuse, repair, and recycling, the demand for new raw materials and energy-intensive manufacturing processes may decrease. This, in turn, could mitigate environmental degradation, reduce water consumption, and lower carbon emissions associated with traditional linear textile production. However, realizing the full potential of increased textile circulation comes with certain requirements. First and foremost is the need for a shift in consumer behavior. Embracing a circular fashion model requires consumers to move away from the traditional "buy-wear-dispose" mindset and adopt a more mindful and sustainable approach to clothing. Education and awareness campaigns can play a crucial role in informing consumers about the environmental impact of textiles and encouraging responsible purchasing habits.

Keywords: Textile production • Consumer behaviour • Increased textile circulation

Introduction

Key requirement is the development of innovative and sustainable textile materials and production processes. Designing textiles with durability, recyclability, and ease of disassembly in mind becomes paramount. This necessitates research and investment in eco-friendly materials, such as biodegradable fibers or recycled fabrics, and the implementation of cleaner production methods that minimize environmental harm. Additionally, the establishment of efficient and accessible textile recycling systems is essential for a successful transition to increased circulation. Collection points. recycling facilities, and infrastructure for sorting and processing textiles need to be established to facilitate the return of used textiles into the production cycle. Collaboration between industry stakeholders, governments, and nongovernmental organizations is crucial in building a robust and integrated textile recycling ecosystem. The implementation of effective traceability and labeling systems is another requirement in the journey towards increased textile circulation. Transparent supply chains and clear labeling indicating the composition and recyclability of textiles empower consumers to make informed choices, supporting brands that align with their values and encouraging responsible disposal practices.

Literature Review

From a regulatory standpoint, governments play a critical role in shaping the landscape for increased textile circulation. Developing and enforcing policies that incentivize circular practices, such as Extended Producer

*Address for Correspondence: Maxwell Easte, Department of Textile Science and Technology, University of Alabama, Tuscaloosa, USA, E-mail: Maxwelleastepee@gmail.com

Copyright: © 2023 Easte M. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 01 September, 2023, Manuscript No jtese-23-120633; **Editor assigned:** 02 September, 2023, PreQC No. P-120633; **Reviewed:** 18 September, 2023, QC No. Q-120633; **Revised:** 22 September 2023, Manuscript No. R-120633; **Published:** 29 September, 2023, DOI: 10.37421/2165-8064.2023.13.563 Responsibility (EPR) programs or tax incentives for sustainable practices, can drive industry-wide adoption of circular economy principles, the increasing circulation of textiles carries both positive environmental implications and a set of necessary requirements. It necessitates a paradigm shift in consumer behaviour, innovation in textile design and production, the establishment of efficient recycling systems, and supportive regulatory frameworks. As the textile industry transitions towards circularity, collaboration and concerted efforts across the entire value chain will be imperative to achieve a more sustainable and environmentally responsible future [1-3].

Discussion

Moreover, the rise of textile circulation demands a revaluation of business models within the fashion and textile industry. Moving away from the conventional linear model, where products are manufactured, used, and then discarded, necessitates a shift towards business models that prioritize durability, reparability, and recyclability. This shift might involve adopting practices like clothing rental services, resale platforms, and innovative leasing programs that extend the life of garments and reduce overall waste. Technological advancements also play a crucial role in meeting the requirements of increased textile circulation. Innovations in recycling technologies, such as advanced mechanical and chemical recycling processes, can significantly enhance the efficiency of reclaiming fibers from used textiles. Additionally, the integration of block chain technology for supply chain transparency and digital platforms for second hand sales can streamline the tracking and traceability of textiles throughout their lifecyclem, Furthermore, increased collaboration and knowledge-sharing across the textile industry are essential requirements. This involves fostering partnerships between manufacturers, retailers, recyclers, and other stakeholders to collectively address the challenges and opportunities associated with a circular economy. Sharing best practices, research findings, and successful case studies can accelerate the adoption of circular principles and help overcome barriers to implementation [4-6].

Conclusion

Addressing the social dimensions of increased textile circulation is equally vital. This includes considerations for the workers involved in the production, distribution, and recycling of textiles. As the industry transforms, ensuring fair labour practices, providing training for new skills required in a circular economy, and safeguarding the livelihoods of those dependent on the linear fashion model become crucial aspects of a just transition. Lastly, consumer engagement and awareness campaigns are on-going requirements for the success of increased textile circulation. Educating consumers about the environmental impact of their choices, promoting the benefits of circular fashion, and encouraging active participation in recycling programs are key components of fostering a circular mindset. Brands and retailers can play a pivotal role in shaping consumer behaviour by prioritizing sustainability, transparent communication, and responsible marketing practices.

Acknowledgement

None.

Conflict of Interest

None.

References

- Agnhage, Tove, Anne Perwuelz and Nemeshwaree Behary. "Towards sustainable Rubia tinctorum L. dyeing of woven fabric: How life cycle assessment can contribute." J Clean Prod 141 (2017): 1221-1230.
- 2. Rahman, Saadman Sakib, Sumi Siddiqua and Chinchu Cherian. "Sustainable

applications of textile waste fiber in the construction and geotechnical industries: A retrospect." Clean Eng Technol 6 (2022): 100420.

- 3. Wang, Fubang, Jixian Gong, Yanfei Ren and Jianfei Zhang. "Eco-dyeing with biocolourant based on natural compounds." *R Soc Open Sci* 5 (2018): 171134.
- Shabbir, Mohd, Luqman Jameel Rather, Mohd Nadeem Bukhari and Mohd Shahid, et al. "An eco-friendly dyeing of woolen yarn by *Terminalia chebula* extract with evaluations of kinetic and adsorption characteristics." J Adv Res 7 (2016): 473-482.
- Javaid, Rahat and Umair Yaqub Qazi. "Catalytic oxidation process for the degradation of synthetic dyes: An overview." Int J Environ Res Public Health 16 (2019): 2066.
- Velusamy, Sasireka, Anurag Roy, Senthilarasu Sundaram and Tapas Kumar Mallick. "A review on heavy metal ions and containing dyes removal through graphene oxide-based adsorption strategies for textile wastewater treatment." Chem Rec 21 (2021): 1570-1610.

How to cite this article: Easte, Maxwell. "Increasing Textile Circulation Consequences and Requirements." *J Textile Sci Eng* 13 (2023): 563.