

Challenging the Fast Fashion Industry: A Zero Fabric Waste Campus

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RESEARCH PROBLEM

PRELIMINARY RESULTS

METHODOLOGY

RESEARCH GOALS AND DO GOOD

CONCLUSION

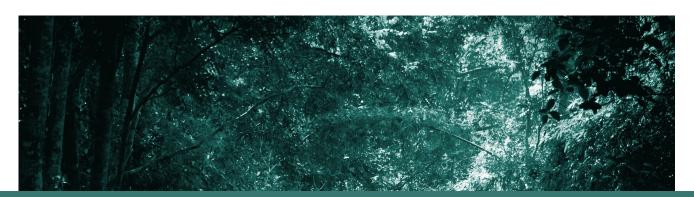
What is Fast Fashion?

- "Quick response production, frequent assortment changes, and fashionable designs at affordable prices"^[1]
- Lifecycle problems
 - Production and consumption waste
 - Environmental and humanitarian crises
 - Planned obsolescence, throw away culture



What is Sustainability?

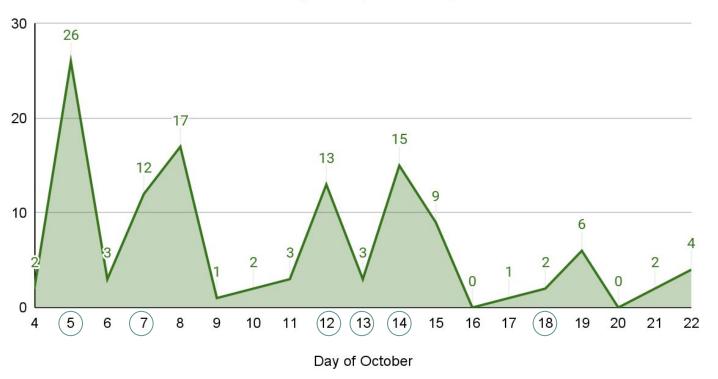
Sustainability is about making best use of the resources available and practicing mindful consumption of goods and services so that all basic needs and quality of life are met without jeopardizing the needs of future generations.^[11]

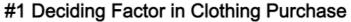


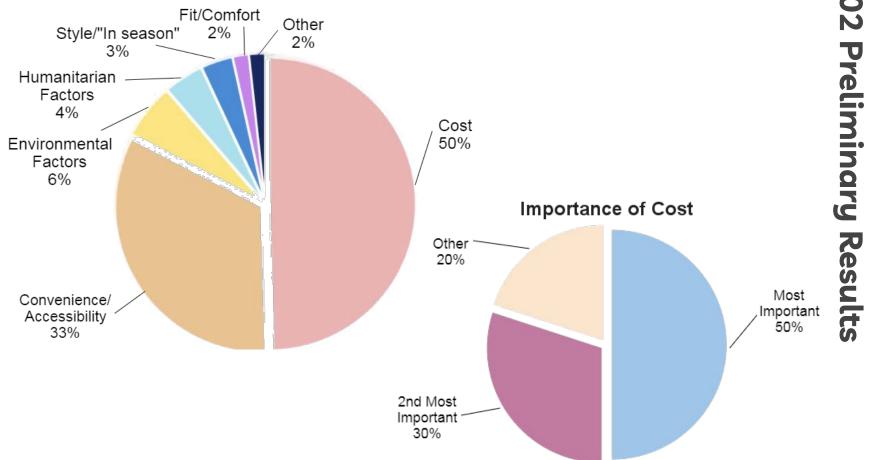
Can a system of collecting, recycling, donating, and reselling textiles be developed to create a zero fabric waste campus? Can this be replicated for application on other college campuses?

How will the attitudes towards fast fashion and textile collection change as a result?

Survey Response By Date







Survey of Attitudes and Behaviors



03 Methodology: Survey

Collection Bins and Textile Sorting

Collection

- Residence halls, Courtyards, and Commons
- QR codes on collection bins

Sorting

- 3 categories: donation, upcycling, recycling
 - Material
 - Quality
 - Recycling requirements



Sustainability Event

Fundraising

- What
 - Pop-up shop reselling highest quality clothing
- When
 - o Spring 2022
 - Maryland Day, Giving Day, First/Second Look Fairs
- Why
 - Give clothes a second life and fundraise
- Where
 - o UMD campus
- How
 - Posters, email lists, social media

Upcycling Unsold Clothes

- What
 - Upcycling event with Green Terp
- When
 - o Spring 2022
- Why
 - Give clothes a second life, encourage sustainable behavior, recruit for interviews, and spread awareness
- Where
 - o UMD Campus
- How
 - Posters, email lists, social media
 - DIY and upcycling methods

03 Methodology: Upcycling

How Will We Do Good?

- Develop a Zero Waste Fabric Blueprint to share our information with outside universities
- Raise awareness in college students about:
 - The humanitarian crisis in the fast fashion industry
 - The environmental and social impact their clothes are having on the world around them
 - Provide a sustainable and accessible method for students to dispose their clothes
 - Donate clothes beyond the campus community



06 Conclusion

Dr. Mary Beth Furst

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THANK YOU!

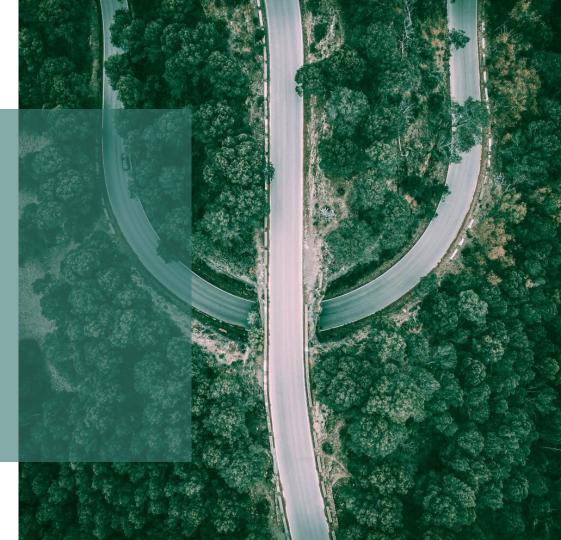
Questions?

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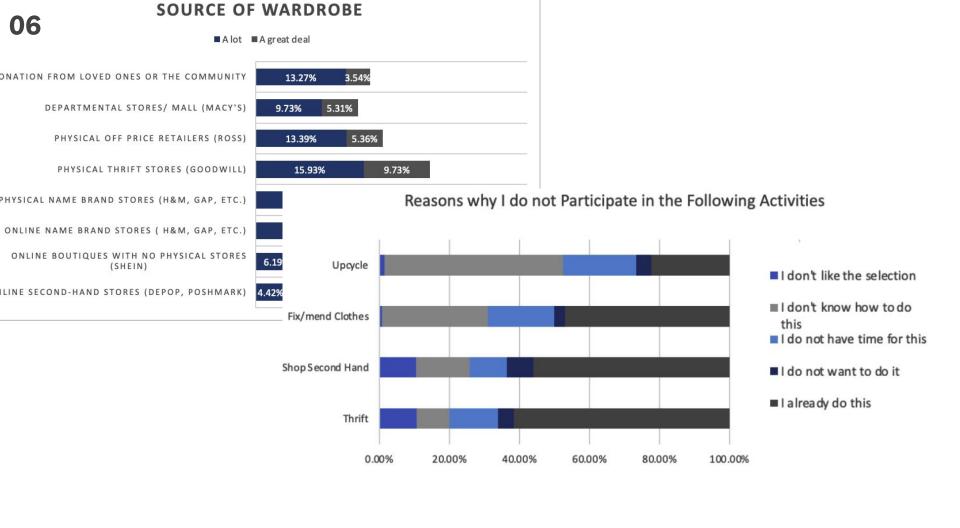
teamrecycloth.weebly.com

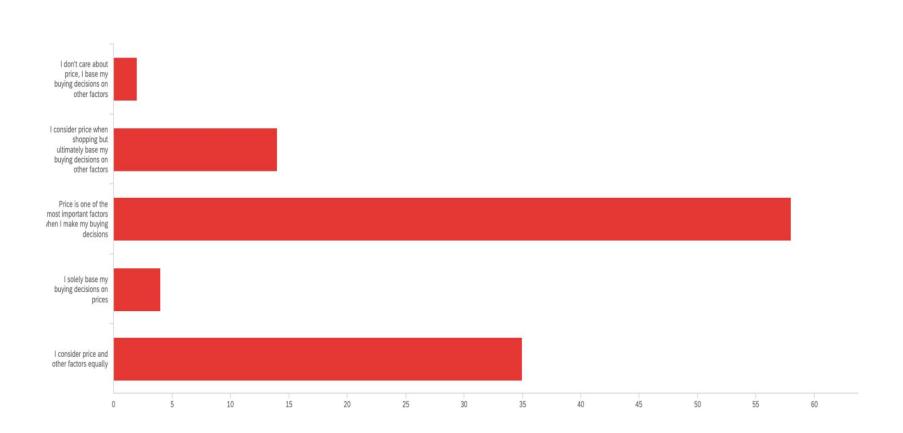


- [1] Caro, F., & Martínez-de-Albéniz, V. (2015). Fast Fashion: Business Model Overview and Research Opportunities. In N. Agrawal & S. A. Smith (Eds.), Retail Supply Chain Management (Vol. 223, pp. 237–264). Springer US. https://doi.org/10.1007/978-1-4899-7562-1_9
- [2] Thomas, D. (2019). Fashionopolis: The Price of Fast Fashion and the Future of Clothes. Penguin Press.
- [3] Ellen MacArthur Foundation. (2017). A New Textiles Economy: Redesigning Fashion's Future. https://www.ellenmacarthurfoundation.org/assets/downloads/publications/A-New-Textiles-Economy_Full-Report_Updated_1-12-17 .pdf
- [4] World Bank, (2019). How Much Do Our Wardrobes Cost to the Environment? World Bank. https://www.worldbank.org/en/news/feature/2019/09/23/costo-moda-medio-ambiente
- [5] Thorisdottir, T. S., & Johannsdottir, L. (2019). Sustainability Within Fashion Business Models: A Systematic Literature Review. Sustainability, 11(8), 2233. https://doi.org/10.3390/su11082233
- [6] Luongo, G., Thorsén, G., & Östman, C. (2014). Quinolines in Clothing Textiles—A Source of Human Exposure and Wastewater Pollution? Analytical and Bioanalytical Chemistry, 406(12), 2747-2756. https://doi.org/10.1007/s00216-014-7688-9
- [7] National Center for Biotechnology Information. (2021). PubChem Compound Summary for CID 7047, Quinoline [Database]. National Center for Biotechnology Information. https://pubchem.ncbi.nlm.nih.gov/compound/7047
- [8] Segran, E. (2019, March 2). Your H&M Addiction Is Wreaking Havoc on the Environment. Here's How to Break It. Fast Company. https://www.fastcompany.com/90311509/we-have-to-fix-fashion-if-we-want-to-survive-the-next-century
- [9] Hoskins, T. E. (2014). Stitched Up: The Anti-Capitalist Book of Fashion. Pluto Press; JSTOR. https://doi.org/10.2307/j.ctt183p020
- [10] Rana Plaza. (n.d.). Clean Clothes Campaign. Retrieved February 23, 2021, from https://cleanclothes.org/campaigns/past/rana-plaza
- [11] Gordon, R., Carrigan, M., & Hastings, G. (2011). A framework for sustainable marketing. Marketing Theory, 11(2), 143–163. https://doi.org/10.1177/1470593111403218
- [13] Shen, D., Richards, J., & Liu, F. (2013). Consumers' Awareness of Sustainable Fashion. 23(2), 134.
- [14] Joy, A., Sherry Jr, J., Venkatesh, A., Wang, J., & Chan, R. (2012). Fast Fashion, Sustainability, and the Ethical Appeal of Luxury Brands. E Journal of Dress, Body & Culture, https://doi.org/10.2752/175174112X13340749707123.
- [15] Horton, K. (2018). Just Use What You Have: Ethical Fashion Discourse and the Feminisation of Responsibility. https://doi.org/10.1080/08164649.2019.1567255









Survey of Attitudes and Behaviors

- We have received 121 survey responses (as of 10/22) for the Survey of Attitudes and Behaviors.
- Here are some preliminary results:
 - 50.52% of respondents put cost as the most important factor when deciding on a clothing purchase.
 - Only 2.06% of respondents put environmental factors as the most important factor when deciding on a clothing purchase.
 - 4.12% of respondents put humanitarian factors as the most important factor when deciding on a clothing purchase.
 - 45.45% of respondents said they do not know how to upcycle clothing.
 - 16.31% of respondents described Fast Fashion as bad for the environment.