Extended Abstract

6th PLATE 2025 Conference Aalborg, Denmark, 2-4 July 2025



The Importance of Reuse and Repair – A Call for Canadian Municipal Action to Promote Clothing Repair Events

Carmen Vung^(a), Mary Jane MacDonald^(b), Rachel McQueen^(a), Anika Kozlowski^(c)

- a) University of Alberta, Edmonton, Canada
- b) Toronto Metropolitan University, Toronto, Canada
- c) University of Wisconsin-Madison, Madison, USA

Keywords: Clothing; repair events; mending; municipal action; sustainability.

Introduction

The fashion industry persists as a major contributor to widespread environmental issues, including global CO2 emissions, water overconsumption, pollution, and landfill accumulation (Niinimäki et al., 2020). These negative outcomes are a direct result of the 'fast fashion model', which encourages excessive consumption and waste due to the vast availability and short lifespan of cheaply produced, poor-quality garments (Linden, 2016). An estimated 1.1 million tonnes of textile waste is generated in Canada each year, resulting in a per capita average of 31.2 kg/year (Cheminfo Services Inc., 2022).

In Canada, household waste collection and disposal is the responsibility of municipal governments (Degenstein et al., 2021). Only recently have there been efforts to address the textile waste stream, with a few municipalities having implemented textile waste diversion programs (ECCC, 2024). Though municipal governments rely on industry and non-profit organisations to handle used clothing, a critical way to reduce initial waste is through active repair

Clothing repair events are a growing global initiative to address textile waste. They are organised, local community workshops that offer the materials, tools, and skilled volunteers to help people fix their damaged clothing and textile items (Repair Café, 2024). The act of mending diverts the clothing waste stream and prolongs garment life, supporting the idea of a circular economy (Diddi & Yan, 2019; Ellen MacArthur Foundation, 2013). Additionally, clothing repair events are an intervention for the general decline and loss of mending skills (McQueen et al., 2022). Participants can develop self-repair skills, build community

connections, and promote environmentally sustainable habits with one another. This study has two main objectives: 1) to investigate how Canadian municipalities are providing their residents with information and support for dealing with unwanted textiles, with an emphasis on repair; and 2) to assess Canadians' awareness and access to community clothing repair events, by focusing on differences between attendees and non-attendees. Our goal is to identify gaps and opportunities for municipal action, in order to further encourage clothing repair event attendance.

Methods

A content analysis was conducted to explore how textile waste management information is 81 communicated across Canadian These municipalities were municipalities. identified following a Google search of Canadian urban and rural municipalities for some mention of textile waste where they had either an active textile diversion program or a municipal or community repair initiative. The evaluation of municipal websites followed criteria based on the waste hierarchy, focusing diversion initiatives, on textile citizen awareness and education, options unwanted clothing, and general reduction plans. An official textile diversion or recycling program (TDRP) is defined as an initiative specifically labeled as such on a municipal website, or one that includes information aimed at reducing landfill waste.

An online survey was developed to evaluate Canadians who had and had not attended clothing repair events. Participants were recruited using convenience sampling methods, with a focus on disseminating the survey through social media platforms (e.g.,



Vung et al.

The Importance of Reuse & Repair- A Call for Canadian Municipal Action to Promote Clothing Repair Events

Facebook, Instagram). Additionally, active Canadian repair groups were identified and share contacted to help standardized recruitment notices. The survey questions came from literature sources with established possible. validated scales where adaptations when necessary. Question topics included clothing repair behaviours, previous clothing repair event attendance, and factors affecting the interest and ability to attend these events. All questions were closed-ended multiple choice, with forced-choice responses.

Findings

Municipal Textile Diversion/Recycling Programs

Out of the 81 municipalities, only 14 (17%) have official TDRP. All 14 municipalities included clothing donation as a core initiative; however, only 4 (28%) implemented additional initiatives beyond donation. Three municipalities provided information on waste reduction, with two of those highlighting reuse and repair strategies to further reduce waste. One municipality allowed residents to bring clothes to a recycling depot, but did not inform them about what happens to the clothing after it is dropped off.

Notably, only two textile diversion programs, located in Vancouver and Toronto, offered practical initiatives that actively involved citizens in clothing reuse and repair. In these cases, donation was positioned as a last resort rather than the primary solution. Toronto was particularly unique, as it was the only program to provide in-person, hands-on access to clothing repair services.

Community Repair Events Survey

A total of 582 valid responses were collected, of which107 participants had previously attended a clothing repair event, whereas 475 had not. Of the non-attendees, 39 participants indicated having previously attended a repair event for non-clothing/textile items, while the remaining 436 had never attended any type of repair event. When non-attendees were asked if they had heard about clothing repair events prior to the survey, 50.1% selected "no".

Table 1 (see Appendix) shows agreement rating results for a series of statements on the ability to attend clothing repair events, based on various physical, psychological, and environmental factors. Independent sample t-

tests for statements 1, 2, 5, and 9, relating to physical capabilities and digital/transportation means, revealed that there were no significant differences between attendees and nonattendees at a significance value of 0.001. However. differences were found statements 3, 4, and 6-8, corresponding to psychological factors of social anxiety and confidence, and the perception of repair event occurrences, items in need of repair, and time availability. Despite a low response rate for previous clothing repair event attendance, both participant groups displayed a relative ability to attend clothing repair events.

Discussion and Conclusions

Traditionally, textile waste collection within Canada has been inadequately managed, with municipalities relying heavily on business and charity donations (Weber et al., 2017). Despite various newer textile diversion initiatives implemented by Canadian municipalities, there exists a lack of transparency regarding if and how these programs are being executed; for the few that are explained, the municipalities resort to either donation or recycling programs. Although important, both methods have limitations. Clearing out closets and donating to charity can allay the guilt of buying more new clothes (Ha-Brookshire & Hodges, 2009), and unsold items in local retail outlets may end up exported to the global south. Most items that are immediately recycled undergo labour and resource intensive processes, to create nontextiles for industrial purposes (Harmsen et al., 2021). In contrast, clothing repair facilitates reuse, reduces consumption, and minimizes environmental impacts by keeping clothing in the hands of the original owner (Levänen et al., 2021; Neto & Ferreira, 2021).

Although the decision to attend a clothing repair event ultimately depends on the individual, the reported ability to attend by both participant groups, in addition to a majority of non-attendees not having heard about such events before, indicate a need for municipalities to improve public awareness and outreach for these events. Garment reuse-repair should take priority over the current municipal diversion methods of donation and recycling, and municipal promotion for clothing repair events would likely lead to increased participation, contributing to greater fashion sustainability.



Vung et al.

The Importance of Reuse & Repair- A Call for Canadian Municipal Action to Promote Clothing Repair Events

Acknowledgments

The authors would like to thank the Social Sciences and Humanities Research Council (SSHRC) of Canada for their funding.

References

- Cheminfo Services Inc. (2022,May Characterizing Reuse, Recycling and Disposal Textiles of in Canada. https://nactr.ca/wpcontent/uploads/2022/07/Characterizing-Reuse-Recycling-andDisposal-of-Textilesin-Canada.pdf
- Degenstein, L. M., McQueen, R. H., & Krogman, N. T. (2021). 'What goes where'? Characterizing Edmonton's municipal clothing waste stream and consumer clothing disposal. *Journal of Cleaner Production*, 296, 126516. https://doi.org/10.1016/j.jclepro.2021.1265
- Diddi, S., & Yan, R. N. (2019). Consumer perceptions related to clothing repair and community mending events: A circular economy perspective. Sustainability, 11(19),
- 5306. https://doi.org/10.3390/su11195306
 Ellen MacArthur Foundation. (2013). Towards the circular economy Vol. 1: an economic and business rationale for an accelerated transition. https://www.ellenmacarthurfoun dation.org/towards-a-circular-economy-business-rationale-for-an-accelerated-transition
- Environment and Climate Change Canada (ECCC). (2024, July 8). Addressing plastic waste and pollution from the textile and apparel sector: consultation document. https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/consultations/roadmap-plastic-waste-pollution-textile-apparel-sector/proposed-roadmap-plastic-waste-pollution-textile-apparel-sector.html
- Ha-Brookshire, J. E., & Hodges, N. N. (2009).
 Socially responsible consumer behavior?:
 Exploring used clothing donation behavior.
 Clothing and Textiles Research Journal,
 27(3), 179–196.
 https://doi.org/10.1177/0887302X0832719
- Harmsen, P., Scheffer, M., & Bos, H. (2021). Textiles for Circular Fashion: The Logic behind Recycling Options. *Sustainability*, *13*(17), 9714. https://doi.org/10.3390/su13179714
- Levänen, J., Uusitalo, V., Härri, A., Kareinen, E., & Linnanen, L. (2021). Innovative recycling or extended use? Comparing the global warming potential of different ownership and end-of-life scenarios for textiles. Environmental Research Letters, 16(5),

- 054069. https://doi.org/10.1088/1748-9326/abfac3
- Linden, A. R. (2016). An analysis of the fast fashion industry. Senior Projects Fall 2016. 30. https://digitalcommons.bard.edu/senpr oi f2016/30
- McQueen, R. H., Jain, A., McNeill, L. S., & Kozlowski, A. (2022). The role of resources in repair practice: Engagement with self, paid and unpaid clothing repair by young consumers. *Textile Research Journal*, *93*(3-4), 576-591. https://doiorg.login.ezproxy.library.ualberta.ca/10.11 77/00405175221123067
- Neto, A., & Ferreira, J. (2021). "I still love them and wear them"—Conflict occurrence and management in wearer-clothing relationships. *Sustainability*, *13*(23), Article 23. https://doi.org/10.3390/su132313054
- Niinimäki, K., Peters, G., Dahlbo, H., Perry, P., Rissanen, T., & Gwilt, A. (2020). The environmental price of fast fashion. Nature Reviews Earth & Environment, 1(4), 189-200. https://doi.org/10.1038/s43017-020-0039-9
- Repair Café. (2024). About. Retrieved July 31, 2024, from https://www.repaircafe.org/en/about/
- Weber, S., Lynes, J., & Young, S. B. (2017). Fashion interest as a driver for consumer textile waste management: Reuse, recycle or disposal. *International Journal of Consumer Studies*, 41(2), 207–215. https://doi.org/10.1111/ijcs.12328

Extended Abstract

6th PLATE 2025 Conference Aalborg, Denmark, 2-4 July 2025



Appendix

Statement	Attendees	Non- Attendees
1. I believe I am physically capable of repairing clothes	6.39 ± 0.77^{a}	6.31 ± 0.95 ^a
2. I believe I am capable of learning and following clothing repair instructions	6.30 ± 0.83^a	6.26 ± 0.93 ^a
3. I would feel too socially anxious to attend a clothing repair event	2.62 ± 1.83 ^a	3.39 ± 1.93 ^b
4. I am confident that I could attend a clothing repair event if I wanted to	6.21 ± 0.96 ^a	5.68 ± 1.32 ^b
5. I have the means (e.g. working device, internet connection, social media) to	6.32 ± 0.99 ^a	6.25 ± 0.93 ^a
become aware of clothing repair events near me		
6. There are likely to be plenty of opportunities to attend a clothing repair event	4.87 ± 1.60 ^a	4.00 ± 1.55 ^b
7. I have clothing items that need repair	6.03 ± 1.20 ^a	5.10 ± 1.75 ^b
8. If I wanted to, I would have the time to attend a clothing repair event	5.69 ± 1.14 ^a	5.13 ± 1.48 ^b
9. If I wanted to, I would have the transportation means to attend a clothing repair	6.10 ± 1.14 ^a	6.04 ± 1.28 ^a
event		
Note: different super-scripted letters indicate a significant difference in agreement rating $(p \le 0.001)$		

Table 1. Mean (\pm standard deviation) for statements regarding the ability to attend a clothing repair event based on a 7-point scale, where 1 = "strongly disagree" and 7 = "strongly agree" (Attendees N = 107; Non-attendees N = 475).