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GATHERING USER STORIES FOR CLOTHING LONGEVITY IN THE WAIKATO: INITIAL ANALYSIS

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GATHERING USER STORIES FOR CLOTHING LONGEVITY IN THE WAIKATO: INITIAL ANALYSIS

Rebekah Harman and Emily Russell

INTRODUCTION

Contemporary fashion is informed by past, current and future contexts. Sustainability is the biggest challenge in the fashion industry currently (Amed et al., 2020, 2024). As a result, there is a global drive towards strategies to create a more sustainable fashion industry. Amongst a range of sustainability issues, a critical one is the high production and consumption of fashion garments per year. Alarming clothing items are estimated to be used just seven times before discarding (Thomas, 2019). A recent report found that the average Australian purchases 56 items of new clothing every year, this surpasses data from the USA (53 new items per year) and the UK (33 new items per year) (Gbor & Chollet, 2024). In Aotearoa New Zealand 220,000 tonnes of textile waste is sent to landfill per annum (Casey et al., 2023). Based on raw data collected from Statistics New Zealand, in 2018 New Zealanders imported the equivalent of seven new t-shirt type garments per person. With consumption on the rise, what users do with garments once they own them is critical. The use phase of clothing is known to account for a significant portion of the environmental footprint of a garment (Langley et al., 2013; Muthu, 2015), however tracking what people choose to use is not yet well documented. One aspect of usage is holding onto clothes for a long time and wearing them frequently. Therefore, this research sought to find out more about clothing items that were kept, loved and worn, as opposed to why people choose to discard them. Knowing this information might give further insights about more sustainable modes of consumption and strategies for designing clothing that will be held onto for a long time.

This article reports on a collaborative research project situated in the Waikato, Aotearoa New Zealand, examining the lived history of garments via an online-survey and one-to-one interviews with garment wearers. The aim for the research was to gain insights into the characteristics of garments that people were holding onto and wearing for a long time and then identify pathways the information could hold for the future. The two research questions were:

What are the characteristics of garments that users are holding onto, loving and wearing in the Waikato, Aotearoa New Zealand?

What pathways might this information hold for further exploration in the future?

Together, a small team of creatives (see Figure 1), have surveyed, documented and interviewed local Waikato residents to find out what garments people have kept, worn and loved the most. Having established a creative team, we allocated roles: graphic and brand design (Emily Russell), sustainable fashion researcher, survey designer and interviewer (Rebekah Harman), and photographer/videographer (Holly Russell and One Man Crew). Together we were collectively motivated by a shared interest to better understanding characteristics of loved and worn garments as a strategy to potentially discover information about clothing longevity.

The study builds on previous research published in 2021, however that was on a small scale, interviewing five people (Harman, 2021). The previous research indicated that there might be a difference between what clothing people loved the most, and what they wore the most, therefore this research was structured to separate out most loved and most worn garments to further identify any difference.

This article gives an overview of our project to date, including the background to the project, explaining how we have used creative media to drive understanding along with initial insights.

BACKGROUND

Over 150 billion garments are produced every year (Koperniak, 2015), and less than 1% of fashion textiles are recycled (The Waste Resources Action Programme, n.d.). Global consumption of clothing increased by 60% between 2000 and 2014 (Vasquez Jr, 2023), leading to the term fast fashion. Fast fashion relies on quickly changing fashion trends to drive further production of garments, including companies such as Pantone (with their colour of the year) driving fast changing colour trends (Segran, 2020). What is additionally concerning is that globally, as consumption increases, the period of time people hold onto garments has halved, which is a dramatic decrease (McKinsey & Company, 2016). Fashion executives are continuing to seek ways to grow the fashion market speeding up trend cycles and using strategies such as nearshoring, a concept that keeps production in nearby countries rather than distant countries, “leading to 3-5x faster lead times” on manufacturing (Amed et al., 2025, p. 22).

Longevity in the use phase of clothing is a goal for sustainable fashion advocates globally, as it is estimated that doubling the lifetime of one garment, could nearly half its environmental impact (Fashion for Good & Intellectap, 2020; Redress Limited, 2022; Sandin et al., 2019). Additionally, slowing down the use phase of garments is the premise of slow fashion. Slow fashion is a term initially introduced by Kate Fletcher (Fletcher, 2007) with the aim of increasing a garments ‘life’ by a user choosing to hang onto a garment, wearing it for longer and therefore lessening the speed at which a garment goes to landfill. Here the consumer or user selects purchases carefully and thoughtfully and then wears each item for a long time (ten to twenty-five years). Colour palettes for slow fashion garments typically draw on neutral colours. Slow fashion additionally notes that to design what is used, garment design must respond to users in their specific context (Gill, 2012). Understanding people’s local clothing practices is therefore necessary. Much has been written about the increasingly fast pace of production in the fashion industry, however there is still much work to be done to better understand what garments endure for users.

Longevity in clothing relies on physical longevity and psychological longevity of the garment (Redress Limited, 2022). Physical longevity requires garments to be made robustly. Psychological longevity requires an emotional connection between the wearer and the garment. Product attachment theories suggest that there are seven key factors that encourage people to increase their attachment to an item of clothing. These are; memories, events and places, identity, utility, life vision, enjoyment, market value and reliability (Humphries-Smith, 2008).

To better understand longevity, we look at what consumers consider to be their most loved clothing items, and most worn clothing items. Ethnographic methods, studying people in their own environments to gain understanding, are increasingly used by social researchers in the field of design to better understand the “users”. Fashion has typically taken a top-down approach, whereby the designers typically design for a target market, but are disconnected from the use stage (Gill, 2012). With user centred and human centred design processes in the fashion industry often being limited to a few designers worldwide, such as Lucy Jones, designing garments for those seated, rather than standing, such as wheelchair users (Jones, 2015) or Burberry designing custom-made apparel for activist Sinead Burke, who has achondroplasia (resulting in a short stature). It is valuable to gather information on the ‘use’ stage to better understand characteristics of what is being used, loved and worn as this information can then inform future exploration.

There are three lenses through which consumer behaviour is commonly explained – economic, psychological, and anthropological. Kate Fletcher, a leading academic in the field of sustainable fashion and textiles, notes that understanding consumer behaviour needs to consider real experiences and the way people use clothing (Fletcher, 2011). As previously mentioned, the use phase is known as a hotspot to further examine, due to clothing being expected to have a longer life after purchasing (Muthu, 2015). Within Aotearoa New Zealand there is limited information on what the use phase looks like for users (Nautiyal et al., 2023). Using methods such as life cycle analysis, tracking of the environmental footprint of clothing production is gaining momentum, although data sets are still uncertain. Whereas the environmental footprint of the use stage of garments remains mostly unknown (Sohn et al., 2021). Initial findings from one user study in Aotearoa New Zealand indicate that different countries have different behaviours around using and caring for clothing. For instance, a study of the use phase of woollen and synthetic jumpers (Nautiyal et al., 2023) uncovered that New Zealanders appear to be wearing woollen jumpers nearly double the number of wear events to similar studies in Germany and the United Kingdom (Nautiyal et al., 2023; Wiedemann et al., 2020). This may indicate that regions or nations have differing behaviours regarding holding onto and wearing clothing, therefore it is critical that data is gathered nationally and not generalised globally.

WHAT WE DID:

We conducted an online survey, followed by in-person one-to-one interviews. There were two main survey questions: what is your most loved clothing item? And what is your most worn clothing item? (See Figure 2 and 3). We had 103 respondents to our online survey. Respondents had to meet the criteria of being located within the Waikato, as well as be 18 years or older. The criteria were put in place for logistical reasons, with the idea that other regions could be surveyed in the future, creating a national 'picture'. Respondents were encouraged to tell us as many details as they would like about the garments. In the survey people could choose to have a face-to-face interview, where we sought to better understand the characteristics of the clothing items and reasons for wearing and loving them.

We documented the most loved clothing items and most worn clothing items, using photography and videography. Where possible creative media was used to drive understanding and engagement with the survey. Additionally, an Instagram account, [sustainable_clothing_research](#), was created to highlight the project. Therefore, in addition to creating a survey, a brand was developed for the research, to communicate the survey and its findings.

As a team we developed a brand alongside the early research. The name given to the project was Worn Well, to describe the idea of much used garments. Emily Russell, designer for the project brand, created a list of key words that were fundamental to the brand identity of the project. These were sentimental, identity, reliable, nostalgic, textile, pattern, construction, handmade and intertwined. The key words, along with the concept of craftsmanship resulted in Russell deciding to create hand drawn type as part of the brand for the project. In crafting the "worn well" wordmark, the aim was to emulate the feel of the cotton thread within the letterforms. Experiments were conducted laying down cotton thread to form the words, to capture the sense of flow and organic essence of the thread. The intention was, for the logo creation process to mirror the act of making and sewing, paying homage to the intricate craftsmanship involved in crafting long-lasting clothing. For Russell, it was critical to include a human aspect (herself) in the process to have a real-life experience. Hand-lettering requires focus and patience, a process that is slow but forces the designer to fully immerse themselves in the moment.

Russell generated concepts (see Figure 4), then scanned the type into the computer, recreating them while keeping imperfections to preserve the essence of being made by hand (see Figure 5). Symbol inspiration for the brand came from two sources, the blocks that patterns for garments are created from, and the cut-out shapes used by Henri Matisse. Russell was inspired by how Matisse emphasises the interplay between form and colour. He experimented with various shapes and colours, arranging them in compositions that exude rhythm and energy. There is something very individual about those shapes he created, reminding her of individuality and expression of identity when wearing clothing.

Colours used in the branding were inspired by the colour of paper domestic clothing patterns and landscape. Russell had memories of her mum making kid's clothes when she was young, and recalled those bits of brown tissue that would flutter around. Brown hues are often perceived of as being a more eco-conscious choice, because bleach is avoided during the paper processing, thereby reducing amount of chemical processing (Grascogne Group, n.d.). Consumers have typically associated brown paper with ideas of environmentally friendly (Van Schoubroeck et al., 2023). Russell sought to find imagery of beaches around Wellington's coastline, where Harman studied, to pull further colours from. Russell wanted to draw inspiration from a raw beach setting, because she felt that would signify a flourishing ecosystem.

The typeface crafted by Russell was used to create a logo, and then paired with a purchased typeface called Pluto, designed by Hitesh Malaviya. Pluto was selected as it is renowned for its modern sans-serif style characterised by clean lines and geometric forms. This related well to the garment block shapes and critically was easy to read. A key consideration throughout the project has been on clarity of visual communication to a public audience.

As previously noted, participants for the in-person interviews were self-selected as part of the online survey. Methodologies for qualitative research were used, following Kvale's seven stages for conducting in-depth interviews (Kvale, 1996). Qualtrics was used to gather the online survey information, with a communication plan created for recruitment. Following ethics approval, both active and passive methods of recruitment were used (Negrin et al., 2022). Passive recruitment methods used were a press release, resulting a newspaper article in the *New Zealand Herald* (see Figure 6), an appearance on a local radio show, and social media posts into community pages. Active strategies involved creating sharable posts on social media, which encouraged person-to-person involvement. The inclusion criteria required participants to be 18 years or older, and to be currently living in the Waikato. In person one-to-one interviews were documented using video and photography so people's stories could be used in the future to inspire others to hang onto clothing.

Of the 103 Waikato based people who responded to our online survey, these accounted for 25 different ethnicities and 9 genders. Eleven of those surveyed had an in-person interview, which was videoed, and the garments were photographed.

INITIAL INSIGHTS FROM OUR SURVEY

While we had primarily sought to document garment characteristics in the online survey, many participants were very descriptive in their responses. Examples of responses were, "fabric is silky to touch, feels luxurious, jacket is comfy and roomy" about a most loved reversible bomber jacket (see Figure 7), and "t-shirt that says Polaroid and has these gorgeous colours...it reminds me of all the trips that I've worn it on" about a most worn garment (see Figure 8). Other examples were very specific about how they obtained the garment, and where they were. For example, "I found it while on a gap year course in Havelock North, 8 years ago" about a most loved navy-blue cardigan. Another descriptive example, "A bright blue fleece. It has a pocket in the front for you to put your hands in to keep warm, and a zip from halfway. It was originally for hiking, and I got it in an outdoors store in Oxford, UK. I now use it for gardening but would drag it out for hiking too (we don't do as much anymore)" about a most worn item.

Garment types were described by all participants in the survey. Colour was described by a high proportion of participants, but not all. Sixty-eight participants mentioned colour for their most loved garment, while forty-seven mentioned colours for their most worn garment. While colour is an incomplete data set, there is still enough data to draw broad conclusions.

Emotions and feelings came across strongly when people wrote about their most loved clothing items. Examples of the type of language used were: "fits perfectly", "beautiful", "unique", "comfortable", "perfect", "cute", "makes me feel professional, after parental leave", "it's a beautiful, feminine, joyous thing". When writing or speaking about most worn clothing items utilitarian reasons came across strongly, with people commenting aspects such as the

pocket placement. Comfort was also important with language used being “soft”, “comfy”, “roomy”, “stretchy”, “fluffy” or something that they could “slip into”.

Forty participants made a point of explaining how they obtained ownership of the garment, even though this was not a question we asked. While 16 bought the garment new, 10 bought the garment second hand. Five people obtained the garment via another family member, five people mentioned specifically being overseas when they got the garment, while the others in this grouping either hand-made the garment or had it custom-made. Additionally, a few participants mentioned items that lived between households, swapping and sharing clothing.

Some survey participants found it difficult to decide whether a garment was most loved or most worn and this theme remained true for our interviewees, who all asked specifically to be reminded which garments they had selected as most loved or most worn. The interviewees recalled the garments, but not whether they had named it as most loved or most worn.

When considering the genders identified in the survey (this section was not compulsory but was completed by all but three of the participants), 75% identified as female. With other genders identified as follows; male, non-binary, cis-gender female, nonbinary takatāpui, fluid, they/them, hetro and I just am.

DISCUSSION

Dresses were the most described item for most loved clothing (see Figure 9), with some participants mentioning key memories, such as it being a wedding dress, or a dress they had worn to an occasion that made up a key part of their identity (such as a first date with their now husband). Places were often mentioned as part of the memory. Enjoyment and expressions of emotion were also associated with dresses discussed. These are all psychological reasons for loving a garment. Memory, events and places are known factors identified earlier as being required for people to attach to a product (Humphries-Smith, 2008).

Colour appeared to be an important characteristic, with black, green and blue accounting for a significant portion of the garments described. Black was the most mentioned colour overall. Much has been written about New Zealanders love for wearing the colour black, with the exhibition and book, *Black in Fashion: Wearing the Colour Black in New Zealand*, outlining a chronology for a country that seems obsessed with the colour. For most loved clothing black and shades of green were mentioned an equal number of times. For most worn, black was the standout winner, with blue identified as second most popular (Figure 10). Colour appeared to be a principle of aesthetics that was important for people to describe. The high proportion of the colour black aligns with an already known colour trend in clothing for New Zealanders.

The use of language differed between garments identified as most loved and those identified as most worn, even though people mentioned struggling to decide if it was most loved or most worn. The use of emotive language and feelings was primarily used for garments identified as most loved, while utilitarian language was predominately used for garments identified as most worn (see Figure 11). Attachment theory suggests that product attachment occurs when the user or consumer feels a sense of commitment and emotion towards a product. The use of emotive language may link to feelings of commitment or attachment. Attachment can also be for utilitarian reasons (Humphries-Smith, 2008), and this is shown in the most worn garments.

Garments were obtained via a variety of sources. While much data can be found about consumption rates, these only track items that are purchased new. Many mentions were made of obtaining items second hand. Additionally, of significance seemed to be garments passed down amongst whanau or family (see Figure 12), or keeping items between friends or family members, a type of fluid ownership between multiple people. This is an area which seems to be under researched and as such, not well understood. However, hanging onto garments and passing them, or sharing them would suggest there is the potential for a strong emotional bond between the garment

and more than one person and the added potential for longevity. In the Australian study, where it was found the average Australian purchases 56 garments per year, it was noted that some of those surveyed purchased high quantities of second-hand, compared with data from other countries (Gbor & Chollet, 2024). This is a pathway for future exploration.

Females were over-represented in this study, at 75%, and not representative of the region's population, where 50.4% identified as male, and 49.4% as female in the 2023 census (Infometrics, 2023). Another study based in New Zealand on sustainability in fashion had an even higher representation of females participating and considered that this might play into societal ideas of gender norms (Wiedemann et al., 2020). Various studies show that women consume more clothing than men (Vino Supraja, 2023), therefore better understanding solely female demographics could be useful.

We are aware that the nature of the survey meant that people were self-selecting for the survey. This means that the interpretation of data is less accurate when applied across a population. However, it is standard practice to use these types of methodologies as described earlier. The final sample size compares well with a UK sustainable fashion study involving 128 participants (Zhang et al., 2021). We are aware that we have described part of a big picture, rather than information that is a universal truth.

CONCLUSION

Creative media, photography, videography and branding, was used to drive awareness and give us an avenue to begin publicly sharing survey responses via an Instagram account. A brand was created, along with a word mark. The process included researching sustainable design practices, as well as using key words, and art and design references as inspiration. This has given us a cohesive and clear way to visually communicate messaging and survey findings.

In summary, most loved clothing was described by participants using emotions and feelings, and colour was often described. Most worn clothing was described in much more utilitarian terms, with comfort being important, and colour described but less so than for most loved clothing. What we discovered through our survey was that characteristics of loved and worn clothing that was being held onto in the Waikato aligned to many of the typical ways that people attach to products, including memories, places, events, identity, utility, life vision, enjoyment and reliability.

Additionally, we discovered that users attach to garments via multiple ownership avenues. Items that were gifted or shared were of equal value to the current user compared to items purchased new. One pathway for future exploration would be to survey users specifically regarding ownership, to explore longevity that may happen through gifting garments or sharing garments. Studies are already emerging on second-hand garment acquisition.

Future exploration into ways to encourage product attachment within fashion design is critical, because studies show that over time the relationship with the product can increase resulting in users taking better care of an item, addressing wear issues (resulting in mending) and treasuring these items resulting in product longevity (Ball & Tasaki, 1992).

While the study focused on a region for logistical reasons, further work could be done to survey other regions around Aotearoa New Zealand, resulting in national level information. This type of information would lead to better understanding user preferences, including colour and style preferences and could be incorporated into the fashion design process.

While we are still part-way through unpacking all the data we received, we believe this type of research is important. Past methods of designing and making need to be challenged because of the high levels of waste and overconsumption within contemporary fashion. Our future lies in better understanding what people are holding on, loving and wearing, and creating for that, rather than taking a top-down approach that seems to most common in the fashion industry. Fashion design needs to centre around a user-centred and human-centred design approach, designing items based on what users love, hold onto and wear if we are to seriously tackle the issue of waste.



Figure 1. Left to Right, Holly Russell, Rebekah Harman, Emily Russell.
Photograph: Geoff Ridder, 2024.



Figure 2. Instagram story post for survey, designer.
Photograph: Emily Russell.



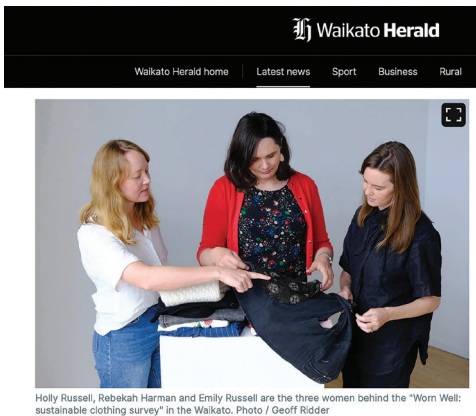
Figure 3. Instagram story post for survey, designer.
Photograph: Emily Russell.



Figure 4. Emily Russell's design process for creating the wordmark.



Figure 5. The final wordmark for the project.



Her experience led to her passion for her research, focusing on better understanding ways to increase a longer life for clothes and reduce their environmental footprint.

Harman also worked on a smaller version of this project in conjunction with Fashion Revolution week.

Emily Russell grew up in Hamilton and is an illustrator and graphic designer. She was working on sustainable branding and publication for the project.

She hated shopping but as she travelled around the world more, she found beauty in artisan processes for making textiles.

Emily's sister Holly Russell is the photographer and videographer for the project. Holly started making her own clothes from a young age, sharing her mother's interest in textiles and crafts.

About five years ago she started to learn more about climate change and became more economically aware, which led to her interest in resisting fast fashion.

Participants wanting to be photographed in their enduring clothing could do so by adding their details to the final page of the survey.

The [survey](#) is available for anyone in the Waikato and residents have until April 2024 to complete it.

Figure 6. New Zealand Herald article about the project.



Figure 7. Quote from the survey about a most loved item, this was shared to Instagram to increase engagement with stories as they were told.



Figure 8. Quote from the survey about a most worn item, this was shared to Instagram to increase engagement with stories as they were told.



Figure 9. Charlee Albany-Pearson wearing her most loved black maxi dress, which she wore on her first date with her now husband. Photograph: Holly Russell, 2024.



Figure 10. Brandon De La Cruz wearing his most loved hooded sweatshirt, which was his father's, and he wears to feel close to him. Photograph: Holly Russell, 2024.



Figure 11. Chris Stewart wearing a most worn bush shirt, that she finds soft and easy to wear for painting and other art activities. Photograph: Holly Russell, 2024.



Figure 12. Megan Lyon wearing a shared family jumper, originally knitted by her mother, for her father to wear. Photograph: Holly Russell, 2024.

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- Amed, I., Berg, A., Balchandani, A., Hedrich, S., Rolken, F., Young, R., & Poojara, S. (2020). *The State of Fashion 2020*. The Business of Fashion, and McKinsey & Company.
- Amed, I., Berg, A., D'Auria, G., Balchandani, A., Rolken, F., Barrelet, D., Grunberg, J., Kersnar, J., de Branche, A., Crump, H., Starzynska, E., & Bain, M. (2024). *The State of Fashion 2024*. The Business of Fashion, and McKinsey & Company.
- Amed, I., D'Auria, G., Bain, M., Balchandani, A., Gonzalez Mendez, P., Grunberg, J., Li, A., Malik, R., Rolken, F., & Zipser, D. (2025). *The State of Fashion 2025* (p. 154).
- Casey, B., Johnston, B., & Thompson, P. (2023). *Recommendation of an appropriate vehicle for Textile Product Stewardship in Aotearoa New Zealand* (No. 1.4; p. 50).
- Fashion for Good & Intellectap. (2020). *The State of Circular Innovations in the Indian Fashion and Textile Industries*. <https://reports.fashionforgood.com/report/state-of-the-circular-innovations-in-the-indian-fashion-and-textile-industry/>
- Fletcher, K. (2007, June 1). Slow fashion. *The Ecologist*. <https://theecologist.org/2007/jun/01/slow-fashion>
- Fletcher, K. (2011). Post-Growth Fashion and the Craft of Users. In A. Gwilt & T. Rissanen (Eds.), *Shaping Sustainable Fashion*. Routledge.
- Gbor, N., & Chollet, O. (2024). *Textiles waste in Australia: Reducing consumption and investing in circularity*. The Australian Institute.
- Gill, A. (2012, August 9). *Wearing Matters: Engaging "users" and changing relationships with clothes*. Fashionably Early Forum: Designing Australian Fashion Futures, Canberra, Australia, 98–114.
- Grascogne Group. (n.d.). *Environment*. Gascogne Papier: Environment. Retrieved February 3, 2025, from <https://www.gascognepapier.com/en/environment-commitments/environment/>
- Harman, R. (2021). Loved garments: Observed reasons for consumers using and holding onto garments. *Scope: (Art & Design)* 21 – *Fashion*, 9–18. <https://doi.org/10.34074/scop.1021002>
- Humphries-Smith, T. (2008). Sustainable design and the design curriculum. *Journal of Design Research*, 7(3), 259–274.
- Infometrics. (2023). Regional Economic Profile | Waikato District | Census | Gender. *Infometrics*. <https://rep.infometrics.co.nz/waikato-district/census/indicator/gender?compare=new-zealand&census=waikato-district>
- Jones, L. (2015). LUCY JONES. LUCY JONES. <https://www.lucyjonesdesign.com>
- Koperniak, S. (2015, October 29). MIT Climate CoLab, in collaboration with Nike, launches new materials competition. *MIT News | Massachusetts Institute of Technology*. <https://news.mit.edu/2015/nike-mit-climate-colab-apparel-materialsustainability-contest-1029>
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Sage Publications.
- Langley, E., Durkacz, S., & Tanase, S. (2013). Clothing longevity and measuring active use. *WRAP*. <https://www.wrap.ngo/resources/report/measuring-active-life-clothing>
- Remy, N., Speelman, E., & Swartz, S. (2016 October 20). *Style that's sustainable: A new fast-fashion formula* | McKinsey. <https://www.mckinsey.com/capabilities/sustainability/our-insights/style-thats-sustainable-a-new-fast-fashion-formula>
- Muthu, S. S. (2015). Chapter 5—Environmental impacts of the use phase of the clothing life cycle. In S. S. Muthu (Ed.), *Handbook of Life Cycle Assessment (LCA) of Textiles and Clothing* (pp. 93–102). Woodhead Publishing. <https://doi.org/10.1016/B978-0-08-100169-1.00005-8>

- Nautiyal, M., Hunting, A., Joseph, F., & Cleveland, D. (2023). Examining Practices of Apparel Use and End of Life in New Zealand. *Sustainability*, 15(6), Article 6. <https://doi.org/10.3390/su15065141>
- Negrin, K. A., Slaughter, S. E., Dahlke, S., & Olson, J. (2022). Successful Recruitment to Qualitative Research: A Critical Reflection. *International Journal of Qualitative Methods*, 21, 16094069221119576. <https://doi.org/10.1177/16094069221119576>
- Redress Limited. (2022, October 10). Design for Longevity. *Redress Design Award*. <https://www.redressdesignaward.com/academy/resources/guide/design-for-longevity>
- Sandin, G., Roos, S., Spak, B., Zamani, B., & Peters, G. (2019). *Environmental assessment of Swedish clothing consumption—Six garments, sustainable futures*. <https://doi.org/10.13140/RG.2.2.30502.27205>
- Segran, E. (2020, February 10). Our obsession with “color trends” is killing the planet. *Fast Company*. <https://www.fastcompany.com/90461730/the-dark-side-of-color-forecasting>
- Sohn, J., Nielsen, K. S., Birkved, M., Joanes, T., & Gwozd, W. (2021). The environmental impacts of clothing: Evidence from United States and three European countries. *Sustainable Production and Consumption*, 27, 2153–2164. <https://doi.org/10.1016/j.spc.2021.05.013>
- Supraja, V. (2023, March 20). Is Fast Fashion a Feminist Issue? *Vino Supraja Dubai*. <https://vinosupraja.com/blogs/news/is-fastfashion-a-feminist-issue>
- The Waste Resources Action Programme. (n.d.). Closing the loop on materials in fashion and textiles. WRAP. Retrieved January 9, 2025, from <https://www.wrap.ngo/taking-action/textiles/actions/closing-loop-materials-fashion-textiles>
- Thomas, D. (2019, August 29). The High Price of Fast Fashion—WSJ. <https://www.wsj.com/articles/the-high-price-of-fast-fashion-11567096637>
- Van Schoubroeck, S., Chacon, L., Reynolds, A. M., Lavoine, N., Hakovirta, M., Gonzalez, R., Van Passel, S., & Venditti, R. A. (2023). Environmental sustainability perception toward obvious recovered waste content in paper-based packaging: An online and in-person survey best-worst scaling experiment. *Resources, Conservation and Recycling*, 188, 106682. <https://doi.org/10.1016/j.resconrec.2022.106682>
- Vasquez Jr, R. (2023). Overconsumption in the fashion industry: Fashion Revolution. *Fashion Revolution*. <https://www.fashionrevolution.org/overconsumption-in-the-fashion-industry/>
- Supraja, V. (2023, March 20). Is Fast Fashion a Feminist Issue? *Vino Supraja Dubai*. <https://vinosupraja.com/blogs/news/is-fast-fashion-a-feminist-issue>
- Wiedemann, S. G., Biggs, L., Nebel, B., Bauch, K., Laitala, K., Klepp, I. G., Swan, P. G., & Watson, K. (2020). Environmental impacts associated with the production, use, and end-of-life of a woollen garment. *The International Journal of Life Cycle Assessment*, 25(8), 1486–1499. <https://doi.org/10.1007/s11367-020-01766-0>
- Zhang, B., Zhang, Y., & Zhou, P. (2021). Consumer Attitude towards Sustainability of Fast Fashion Products in the UK. *Sustainability*, 13(4), Article 4. <https://doi.org/10.3390/su13041646>