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**Sustainable Fashion: Influencing Consumer Awareness
and Ethical Consumption through Creative Practice**

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Abstract:

This master's thesis is based on theoretical frameworks on fast fashion, textile waste and the gap between consumer awareness and sustainable action. This research is further supported by literature that treats art and sustainable design as tools for social change. The main objective of the study is to identify ways to influence consumer awareness and promote ethical consumption through the creative practice of upcycling and by encouraging the reuse of materials. An art-based action research (ABAR) approach is followed in this inquiry to investigate the awareness-action gap through three interconnected phases. These include the development of an upcycled accessory collection titled "Waste to wearable" using discarded materials and a participatory workshop to transform waste into jewelry and a public exhibition. Data were collected through participants' interviews, workshop observations, and a reflective research diary. The findings are categorized into three key themes. The first one is that upcycling fosters a strong emotional connection, as participants value the items they create themselves. Second, participants' own handwork for creative practice shifts the perception of waste or discarded material to a resource with potential. Finally, upcycling transforms waste into multiple forms of value, including emotional, environmental, aesthetic, and economic value. This thesis contributes to sustainable fashion research by proposing a practical, unique community-based model to increase awareness and encourage ethical consumption through the creative practice.

Keywords: sustainable fashion, upcycling, consumer awareness, awareness–action gap, Arts-Based Action Research (ABAR), emotional durability, textile waste, community workshop.

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Chapter 1: Introduction

Fashion has a huge influence on our lives and the global economy. Researchers state that, "The fashion industry is a powerful and influential sector, ranking as the third largest manufacturing industry in the world and contributing significantly to the global economy" (Papasolomou et al., 2023, p. 191). It is also deeply connected to our identity. The clothes we choose to wear express our personal and cultural identity such as where we came from, and how we want other people to see us. Barnard (2020) points out, "They are also the condition for us being both an individual and a collective 'us', and in that sense they do not simply or only stand for culture, they are culture."(Barnard, 2020, p. 15). If we look back to history, from ancient Silk Roads to modern online fashion platforms, fashion has always been a way for communities to find their identity. It reflects what is happening in society and influences consumer choices. Even so, the fashion industry is associated with several problematic practices. On the surface, the fashion industry looks very creative and exciting, but on the other side of the coin, it is unpleasant. It is often ignored or brushed under the carpet that the fashion industry poses a huge threat to the planet and the species.

The research study serves as my personal and professional motivation since I have worked directly within that environment as a fashion designer in the readymade garments industry in Bangladesh. An article reveals that, "The industry has grown very rapidly over the years and now assumes the place of the second-largest exporting nation in the global apparel market" (Saif et al., 2025, p. 6). My background in the fashion industry in Bangladesh allowed me to see creative design possibilities and the industry's hidden financial expenses. While production teams developed their systems to maximize operational efficiency, this approach causes environmental damage and harms workers' well-being. I began to notice a growing gap between fashion's glamorous image and its production realities, which became increasingly difficult to ignore. This conflict between creativity and its environmental cost and social impact is a motivation for my research.

1.1 Thesis background

The global fashion industry encourages creativity and personal identity however, it also linked to serious problems such as overproduction, environmental damage, and unfair working conditions.

“The fashion industry is the second largest industrial polluter after aviation, accounting for up to 10% of global pollution” (Niinimäki et al., 2020, p. 189). The fashion industry shows a glamorous image with flashy advertisements, fashion shows and campaigns in social media but the problems are often hidden from consumers. “Impacts from the fashion industry include over 92 million tonnes of waste produced per year...” (Niinimäki et al., 2020, p. 189). Clothing is thrown away without any recycling, while fast fashion pushes people to buy more and use clothes for a shorter time “The rise of fast fashion, which relies on cheap manufacturing, frequent consumption and short-lived garment use.” (Niinimäki et al., 2020, p. 189). The ready-made garments industry can manufacture clothes rapidly and with low cost because it pays its workers very low wages and thus, people often can buy new items for a short period of time before throwing them away but only a few are concerned about this development. Sadly on the other side, there is unfair and unethical treatment that continues, as many garment workers, especially women, are paid very low wages and often work in unsafe conditions (Clean Clothes Campaign, 2023). While working conditions have improved in some contexts, systemic issues persist throughout global supply chains.

Our planet is paying a heavy price for the fashion industry's rapid and unchecked growth and whereas fast fashion encourages overconsumption, people buy more than what they actually need, often driven by impulse and the bandwagon effect rather than genuine desire. This “impulsive” habit doesn't just empty our pockets but also eats up natural resources. For example, to produce just one cotton T-shirt requires about 2,700 liters of water, which is sufficient drinking water for a person over two years (Chapagain et al., 2006). Furthermore, the industry creates massive pollution as the United Nations Environment Programme points out, “The fashion industry contributes approximately 10% of global carbon emissions annually, surpassing the combined emissions of international flights and maritime shipping”(UNEP, 2023). However, I realized that just understanding these problems wasn't enough. Many studies have already explained the fashion industry's negative effect on the environment and the cost our planet pays and the social impacts it causes, but we often overlook the potential of creative practice as a tool for change. I intend to show how such practices can influence not only my own perception but also how others respond and put effort into shifting their perception toward sustainability.

My study took place in Finland as it is known for being a great place to study sustainable design because Finnish people care a lot about the environment and this country has big goals for recycling and reusing materials (Finnish Environment Institute, 2022). I live in Rovaniemi, which serves as the capital of Finnish Lapland and it is famous for Nordic design, people here are known for loving nature, and environmental care. Furthermore, the local university and community groups give us good opportunities to create sustainable design and practices. Rovaniemi city proves to be the perfect place for my study because it has a helpful community, as the local community is an important resource, as my projects involve a participatory research approach, and materials were sourced through local networks such as the Facebook group Roskalava Rovaniemi+ympäristökunnat, which helps to give discarded items a second life. During the search for participants for my workshop, I came across an organization named MoniNet and it supports immigrants and promotes multicultural exchange, also provides a diverse and welcoming setting for creative activities and hosts an event for my workshop.

1.2 The Research Problem: The Awareness-Action Gap

Living in Rovaniemi and attending the University of Lapland gave me some amazing experiences and new ideas. I observed that Finnish people really care deeply about the environment. I have seen how Finns actively reuse their products and that shows how they integrate sustainability into their daily lives. I also noticed that there are many second-hand stores in Finland compared to my home country, and here people often donate their things to help others, which reflects a strong culture of recycling and conscious consumption. However, textile waste continues to be a serious problem. For example, “approximately one hundred million kilograms of textile waste is generated by consumers and companies in Finland every year” (Sitra, n.d.). While doing research, I also found that, “approximately over 40 000 tonnes of textiles were discarded from households in mixed MSW” (Turku University of Applied Sciences, n.d.), meaning that we still throw away too much clothing instead of giving it a second life.

Surprisingly, many people already know there’s a problem with fast fashion, the overconsumption, wastage, and pollution. But knowing isn’t enough. There is a clear gap between what people think and how people act. Many researches show that even among the newer generations who have enormous awareness about sustainability and well beings of planet earth. Yet, when it is time to

make real choices, there is a big gap between what they know and what they actually do. This troubling pattern appears when we look at the real shopping habits. Even though people say they care about sustainability, "...consumers bypass ethical concerns and instead of adopting a more sustainable fashion consumption they retain previous habits that do not necessarily reflect their personal values" (Papasolomou et al., 2023, p. 197). Recent research by Abdelmeguid et al. (2025) examined circular fashion consumption among Generations Y and Z, even though they are highly aware of environmental problems. There is another study that identified multiple factors contributing to this problem. According to some researchers, "While a sizeable percentage, nearly 80 % of respondents, acknowledged the environmental impact of fast fashion, fewer respondents, only 10 %, considered this impact when making purchases, indicating a gap between knowledge and behavior" (Koul et al., 2025, p. 521). It is important to identify the ways to bridge the gap between environmental awareness and consumer action because consumers may understand sustainability intellectually but they do not feel the emotional bond that leads to a change in behavior. I believe design and creativity can make the difference. I want to explore how design itself—whether in clothing, storytelling, brand communication, or consumer experience can inspire emotional connection so people are not only aware of these problems but feel motivated to act. I want to find ways to make sustainable fashion not just an idea, but something people choose emotionally, even when it is harder or more expensive.

1.3 Research Objectives and Questions

The main aim of my thesis is to study how creating upcycled fashion accessories can change the mindset of people and become more aware of their habits. The project requires active participant engagement because it needs them to create new solutions instead of studying existing practices. For this I will involve people in creative activities to see if their ideas about waste and value change. I want to explore whether creativity can help to close the gap between knowing about sustainability and actually acting on it. My thesis is not only about understanding sustainable fashion through theory rather than focus to influence people and raise awareness through creative practice. I want to encourage consumers to think more carefully before they buy a product, while also seeing an old product as garbage, I want people to see it as a possibility.

1. How can upcycled and recycled fashion products create an emotional bond and make consumers cherish their clothing further?
2. How can I, through my creative design practice, raise awareness about sustainability?
3. How can fashion waste be transformed into something valuable?

I have chosen these questions to demonstrate my dedication to understanding theoretical concepts while I can show and work on practical solutions. The first question looks at the emotions of shopping choice or habit. I want to see how products become special to people, more than just their practical use before being thrown away. Second, I examine the role of the designer. I believe designers do not just create products they can also be educators. That represents they can act as a teacher and help others. The third question is about beauty and provides examples of how sustainable fashion is also attractive to buyers as well as good for the planet. These questions will guide both my creative work and written research, will help me explore how design can inspire not just awareness but also real change in the way we think about and use fashion.

1.4 Research Approach and Methodology

To get answers, my priority on research method that values both thinking and feeling, as well as keep focus on analysis and creation. I want to see how creative processes themselves can change the way people understand fashion and waste. This includes my own experiences and the experiences of people whom I interacted with through work. I chose the Art Base Action Research (ABAR) method for my thesis because it fits the research methodology perfectly, as the authors say "The researcher is always a key participant in the research process. In art-based action research, the experiences of the community or research topic are not intended to be studied from a third-party perspective." (Jokela & Huhmarniemi, 2018, p. 12). Art-based research is involves in creative practice at the center of the research by designing, making and experimenting with upcycled fashion. I can get to explore the real emotions, reactions and meaningful realization which achieved from creative work. At the same time Arts base action research encourages reflection and action while connecting artistic practice and influencing positive effects on social and environmental change and to understand things more deeply and in a human way. I explain why ABAR is appropriate for this research, also the role I play as both researcher and designer

and explain how created and collected data and explain the process of how I analyzed the information step by step. I also discuss the ethical considerations that guide the study.

1.5 Research Implementation: Creation, Workshop, and Exhibition

This research took place in Rovaniemi, Finland, from 2025 to 2026 at the University of Lapland and three practical activities formed the core of the implementation: the creation of an upcycled accessories collection, a community workshop, and a public exhibition. Each activity contributed to the research's dual aims of creative inquiry and participatory engagement. I created every single piece of upcycled accessories very carefully and remembered that the collection should be unique but beautiful which includes bracelets, earrings, rings, necklaces, and bags. I gave this project the title "Waste to Wearable." And in this project every piece was made entirely by hand, reflecting my personal investment in the creative process and my dedication to sustainable craftsmanship. And all these physical artifacts which I created became my creative data. The materials I collected locally within the Rovaniemi community, these are mostly discarded textiles, threads, buttons, and broken jewelry through the Facebook group Roskalava Rovaniemi+ympäristökunnat, from donations by students and staff at the University of Lapland, and from local recycling points. Therefore all these sourcing process itself embodied the principles of circularity and community engagement that underpin my research while maintaining a detailed research diary documenting my experiments, challenges, discoveries, and emotional responses, capturing the cyclical process of planning, action, observation, and reflection that is central to ABAR. My entire final collection was later displayed in the public exhibition at Gallery Lyhty, forming the centerpiece of the third phase of my research.

MoniNet hosted a community workshop in Rovaniemi, where diverse local participants attended and brought some discarded and broken materials, with which they created jewelry with their own idea and skills. In my thesis this workshop served as a key intervention in my ABAR approach which allowed me to observe shifts in perception, document creative engagement, and gather qualitative data, with that I got an opportunity to show my own design. Furthermore, at that event I documented participants' engagement through field notes and photography, observing how their perceptions of waste shifted as they transformed discarded items into wearable art, and the end of

workshop I conducted semi-structured interviews and by this I was able to explore their emotional connections to the objects they created and whether the experience influenced their intentions toward future consumption.

I held a public exhibition at Gallery Lyhty at the University of Lapland (Yliopistonkatu 8, Rovaniemi). Located in the F-building on the first floor. The exhibition was open to the public from March 17th to April 1st, 2026. At the exhibition, I displayed my "Waste to Wearable" collection alongside photographs and reflections from the community workshop which I had conducted before, through this I targeted to share my research with a wider audience and invite them to think about waste and fashion in a new light, by showing upcycled objects in the gallery, I wanted to challenge the idea that waste is not just trash. Instead, I hoped to show that discarded materials can be transformed into something beautiful and meaningful and inspire them to create this type of upcycled work. This public exhibition is part of my research, which helped me share my work beyond the university and start conversations about sustainable fashion in the Rovaniemi community.

1.6 Thesis Structure

I organized my thesis into five chapters that move from theoretical foundations through methodological explanation to creative practice and concluding discussion. The first chapter introduces the research initiation through its background information and my personal motivation. The second chapter is the literature Review, which analyzes existing research about fast fashion, textile waste, consumer behavior, and sustainable fashion solutions. The research methodology that I used in my study is described in the third chapter, together with my data collection and data analysis methods, and ethical considerations of my research. My creative project in the fourth chapter of my work includes my upcycled accessories collection, the community workshop I organized, and the public exhibition at Gallery Lyhty. The fifth chapter uses workshop participant data to identify key themes through their quotation analysis, and the results are compared with existing literature. The last Chapter concludes the thesis by summarizing the findings, discussing the limitations of the study, and suggesting directions for future research in sustainable fashion.

Chapter 2: Literature review

2.1 The Phenomenon of Fast Fashion and Textile Waste

While not all do, many people see the fashion industry and find it creative, glamorous and appealing. However, the reality of how clothes are made is actually very unpleasant, and modern clothing production creates a massive environmental crisis worldwide that society can no longer ignore. Researchers agree that the problem is growing fast and each researcher perceives it from a different perspective, as experts say, "It criticizes and resists the consumption-driven society by which global resources are exploited and ecological uncertainty is caused through excessive consumption and unrecyclable waste" (Kim et al., 2013, p. 246). Also, the rapid production of garments worsens the environmental crisis. "At the same time, just-in-time production amplifies fashion trends that lead to overconsumption and generate fashion waste" (Bläse et al., 2024, p. 627). Some other researchers explain, "The fashion industry is well known for being one of the most polluting industries worldwide, and its contribution to textile waste and apparel consumption has grown in significance over the years"(Marin et al., 2024, p. 171). This quotation confirms that the pollution associated with the clothing industry is not a trivial matter but one of a global scale, and that has only worsened over the years. Here, the use of keywords is grown in significance," which means despite many awareness campaigns and various debates on ecology. Yet, the problem has become even more serious and dangerous than before. This issue is increasing because fast fashion relies on a disposable mentality, encouraging customers to return for new trends every couple of weeks rather than wear the same clothing for several years. Other researchers suggest looking at the exact global numbers to understand the real scenario, these statistics shows how massive the scale of the disaster is. Fast manufacturing of inexpensive clothes has resulted in a heap of waste that planet cannot handle naturally. As researchers mentioned, "The rapid growth of the textile industry and fast-fashion has led to the production of about 92 million ton of textile waste per year" (Fan et al., 2024, p. 1929). It is really shocking to imagine the number 92 million tons, equivalent to the weight of millions of elephants or thousands of cargo ships. This enormous amount of waste eventually finds its way into our environment, into the landfills, or even gets exported to third-world countries that do not have the capability to deal with such large amounts of waste. When we compare these two studies, it is clear that the fashion industry creates more waste than the planet can digest, and thus, the economic system fails fundamentally.

On top of that, other studies depict that our societies deal with such a huge quantity of garbage, which adds fuel to the fire. For instance, rather than making use of the items through reuse or recycling, the garbage is mostly incinerated or dumped into the ground, according to experts "Nearly 85% of textile waste is disposed of by landfill and incineration, causing serious environmental pollution and huge resource waste, calling for alternative textile production" (Fan et al., 2024, p. 1929). It implies that the recycling rate of textile waste amounts to only 15 percent. As a result, the remaining 85 percent of the material goes down the drain, and burning these materials releases harmful gases into the atmosphere, contributing to air pollution and global warming. Also, burying these materials in landfills pollutes the soil and groundwater, causing adverse effects on both ecosystems and human life. However, the literature mainly focuses on industrial manufacturing, but this research fails to explain how local communities could find solutions themselves through art.

Finland, known as a sophisticated and environmentally-friendly nation, also faces an urgent problem of fabric waste. One can easily assume that prosperous, highly educated nations such as Finland have already dealt with their waste issues, but despite the number of successful recycling systems and people's environmental consciousness, the quantity of clothes thrown away from the average homes is shockingly high in a recent report shows, "approximately one hundred million kilograms of textile waste is generated by consumers and companies in Finland every year" (Sitra, 2021). Here, the statistical figures are really shockingly high to imagine that 100 million kg is same as the weight of about 20,000 big elephants, which could alternatively fill many garbage trucks parked along the street. Moreover, much of the waste ends up mixed with everyday domestic waste, making it impossible to recycle at city recycling facilities. A recent statistic on local data shows the exact same dangerous pattern as the global data by the researcher from Turku University of Applied Sciences found that "about 44% of the textiles consumed by households were separately collected as end-of-life textiles in 2019; most of the rest went to mixed MSW" (Dahlbo et al., 2021, p. 5). This means that even when people want to do the right thing, the systems in place do not always support them and mixed municipal solid waste is extremely difficult to sort, so these textiles almost certainly end up in an incinerator also while the academic literature highlights the scale of wastage, there remains a significant gap in identifying potential innovations. For this reason, I chose the upcycle work project "Waste to Wearable" for my thesis, which focuses on discovering

alternative uses of this waste within the community by using the waste material as a medium to create wearable pieces of art, even if it is a small step toward sustainability and my research poses a much simpler question: what can be done with this waste today, starting from the waste we already have at home.

2.2 Consumer Awareness and the Action Gap

The term “consumer awareness” means how much the consumers and shoppers truly know about the whole supply chain, social and environmental impacts of the product (cloths) they are buying. Nowadays, in the age of social media many people have second-hand knowledge about environmental change, global warming and all the buzzwords but the real deep understanding and seriousness of this matter is actually quite shallow. Over the time, many researchers have presented significant findings on this topic. When researchers went for deep findings they discovered that "although most consumers claim to be knowledgeable about sustainability-related issues, they lack precise and accurate knowledge on aspects linked to the sustainable supply chain, including fabric, materials, recycling, or re-use of fashion items" (Papasolomou et al., 2023, p. 191). Consumers’ often see TV commercial or social media infomercials about green factories and zero environmental impact of the products they buy are often misleading and misinformed. This exact problem has been supported by recent research stating that "Although even more importance is attached to sustainable fashion nowadays, consumer awareness and information about it is still at an unenviable level" (Mandarić et al., 2021, p. 1). There is a common concept that pollution is bad, every cloths have negative environmental impact because it consumes water, electricity and chemicals, but we have hardly any knowledge and understanding about the whole manufacturing process of clothing or what is the true meaning of sustainable fashion. There is a clear research gap and lack of knowledge in the academic literature as many researchers point out about this deep confusion but hardly test any practical hands-on research to solve or connect the missing link. I tried to provide the workshop. The participants get practical life experience by touching and working with real textile waste as well as get the idea by caring and creating new things that are missing from their regular shopping habits.

The next crucial concept is the part of broad physiological phenomenon which the readers must know, is the "attitude-behavior gap" that I researched in this thesis. It is often describe a situation

where consumers hold positive and ethical values however when they go for purchase garments products they act exactly in the opposite way. Although the consumer is well informed about the true facts about fast fashion, there is still a mental wall which stop them to make more environmental friendly and sustainable choices. This sad reality of human character flow is shown in academic studies, noting that "While a sizeable percentage, nearly 80 % of respondents, acknowledged the environmental impact of fast fashion, fewer respondents, only 10%, considered this impact when making purchases, indicating a gap between knowledge and behavior" (Koul et al., 2025, p. 521). As Koul (2025) said that this strange phenomenon of consumers' behavior is deeply embedded in their psychology. As researchers explain, "This gap, referred to as the attitude-behavior gap (Hulland and Houston, 2021; Sheeran, 2002; Martin and Väistö, 2016), is particularly obvious in the fashion industry, where consumers frequently suppress their well-intentioned positive attitudes towards sustainability when confronted with tempting fast fashion offers" (Teerakapibal & Schlegelmilch, 2025, p. 104). The above statements from researchers it is obviously show that a person's habit to buy cheap clothes is usually stronger than their desire to save the planet. Saving money on product is more tempting for shoppers than long term environmental impact. This is the main research gap, how action-based methods can permanently change the consumers' behavior rather than short-term monetary gain they feel mental satisfaction to purchase something which is genuinely sustainable and renewable. In my research, I am trying to solve the huge gap between knowing and doing the right thing. In thesis workshop, the creative upcycling activities which I worked with participants toward a common goal to change their old habits, resistance for fast fashion and act more sensible why to match their new found knowledge.

This attribute-behavior gap could be successfully close through social key concepts as practical education and personal finances. Other researchers have been previously pointed out and presented key evidence that eco-friendly clothing are usually more expensive, so it is normal human psychology to go for cheaper option which they can afford to buy. Furthermore, researchers show that "The current gap between consumer attitude and real-life actions can be reduced if sustainable clothes fulfill the needs of consumers, as well as by educating them on the topic of sustainability in fashion" (Mandarić et al., 2021, p. 3). This convey the message that people need to buy cloths that fit their wallet, in addition that they can apply their new found awareness on right environmental choice. The literature identifies, there is a huge problem between price and

awareness and it leaves a clear gap. Here comes the responsibility of the big fashion brands which should do the teaching and build awareness among the consumers by providing community-level art solutions, rather than short-sighted infomercials. To close the action gap, we have to give people better options on quality, variety, and price. My "Waste to Wearable" workshop however, tries to show that there is a way to fill the gap by offering to be a part of sustainable fashion. The main objective of my workshop is to teach the community how to upcycle their old clothes or jewelry and convert something entirely new without expending extra money. The gain is personal satisfaction.

2.3 Design for Sustainable Behavior and Emotion

Design is the critical element that can help shape people's behavior, particularly in sustainable fashion, and the main goal is to improve the situation. Choosing the materials and processes system also strongly influences sustainable behavior. "Design itself is a deliberate act of moving from the current status quo, to another preferred state" (Corsini & Moultrie, 2021, p. 2). This means "Designing" by considering the situation about the world currently exists (current status quo), and imagining a much better future (preferred state), and in another article I found similar ideas "transforming unwanted waste into valuable, biodegradable materials could contribute to more sustainable practices in both the aquaculture and fashion industries" (Clavel et al., 2024, p. 2) from this quotation it clearly presence the importance of design being both aesthetic and socially responsible and encourages people to rethink their attitude towards waste generation.

Many studies show that giving information does not necessarily affect people's actions. Emotional engagement is a vital part of encouraging consumer habits. Experts explain, "Emotions are powerful drivers of human behavior that may make people aware of the urgency to act to mitigate climate change and provide a motivational basis to engage in sustainable action. (Doell et al., 2021, p. 1). This quote means people tend to act depending on their emotions rather than their knowledge. However, Studies have also revealed that there might be instances where emotional communication fails because negative information actually has the effect of demotivating people rather than motivating them, as explained by experts, "attempts to leverage emotions via climate communications have yielded unsatisfactory results, with many interventions failing to produce the desired behaviors." (Doell et al., 2021, p. 1).

There is another crucial concept to affective motivation that describes the impact of emotions on decision-making. Individuals are more likely to exhibit sustainable behaviors if their emotions align with their values. Research shows that "consumers are more likely to engage in the target sustainable behavior when marketers use an emotional appeal that matches the brand's expressed values or one that is congruent with consumers' value priority" (Yan et al., 2023, p. 75). The above demonstrates that individuals who experience self-respect and identity are more inclined to behave sustainably.

One more important factor that influences the sustainability of consumer behavior is the shopping environment and price. Studies show people tend to be affected by places of purchasing, but costs are also an important impediment. For example, "only store-related attributes of eco-fashion positively influence consumers' eco-fashion consumption decision, yet, such a relationship can be weakened by the price premium level of eco-fashion" (Chan et al., 2012, p. 193). Thus, even if consumers have intentions to purchase eco-friendly goods, high prices can discourage them. The existing research shows that emotions, individual values, and high prices complicate sustainability behaviors and explores how creative practice as the solution.

2.4 Art as a Tool for Social Change

If we want to know how creative practice can influence ethical consumption, we first need to study how artistic expression interacts with actual social conditions. Most people use art for decorative purposes, but they often do not realize that art can change their perception of their surroundings. Scholars point out that "Art in this view both creates and changes the world; it has a formative as well as a reflective aspect" (Clammer, 2012, p. 226). In other words, art is capable of altering human values that can influencing society, and changing people's perspective on nature by capturing people's imagination. While scholars agree that art can change minds, there is a clear gap in the research that requires us to demonstrate how art can create a local community-based solution that breaks shopping patterns. Scholars emphasize that creative activities enable communities to create their future vision which they want to achieve. Experts explain that "Making art is a physical process of imaging and shaping possibility. It can be seen as a kind of working, as well as acting and projecting the change you want to see" (Berman, 2017, p. 6). In other words, it means people who create art through practical methods develop skills that enable them to protect

their surroundings. The existing academic research has studied the capacity of art to change human perspectives, but a major research deficiency exists because scholars fail to investigate how artistic theories can effectively solve common consumer problems, such as the fast fashion crisis. The solution to this gap requires the arts to transition from theoretical study into community outreach programs, which work to eliminate environmentally harmful shopping practices.

By applying these principles in real-world situations, there is a need for highly collaborative art and dealing with local concerns. Researchers explain that "The results show that when art is collaboratively created and social work operates through these participatory practices, a synergistic relationship emerges that facilitates the achievement of objectives through reflective processes." (Martínez-Vérez et al., 2025, p. 143). The activities on the regional art movement present a straightforward approach to educating the public about sustainable fashion practices, and the development of practical design spaces enables consumers to work with designers and solve environmental problems through sustainable practices.

2.5 Innovative Materials and Zero-Waste Approaches

Sustainable practices need to be implemented from the early stages of the design process, otherwise, we will continue to waste our resources. Researchers explained that "Designers and engineers can positively influence product use if decisions are made at a strategic level prior to design development" (Lilley, 2009, p. 718). This simply means that the best strategy to reduce pollution would be planning ahead, in other words, before a piece of clothing is even made. Another major issue in the fashion industry is the considerable wastage of fabric occurring during the cutting process, and some scholars emphasize that to resolve this issue, "The development and integration of zero-waste patterns in designing sustainable apparel represent a promising approach that supports reducing pre-consumer textile waste and optimizing fabric consumption" (Marin et al., 2024, p. 171). This explains that using creative garment shaping approaches, it is possible to create a design in which no scrap of fabric will remain unused. There are other issues that need to be solved about existing textile waste as well. Nowadays, modern technology is coming up with new, innovative means of reusing old clothes. Some researchers have found that "Additive manufacturing technologies, particularly 4-dimension printing, is flexible, green, and allows on-demand manufacturing, which is one solution to the textile waste problem" (Fan et al., 2024, p.

1929). High-tech equipment might be helpful, society does not require costly technology to create change, in fact the most crucial point is that "Textile waste contains high-quality, low-cost materials that can be re-used and recycled" (Fan et al., 2024, p. 1929). This means used clothing should not be regarded as waste, but a resource capable of being converted.

A recent scientific paper focused on "utilizing salmon industry waste from Chile to produce bio-sequins (BS) and guanine crystals (GC) from salmon skin" (Clavel et al., 2024, p. 1). Basic shiny sequins are made of plastic, harm the environment, and remain in the ocean for centuries after being washed into it but with simple replace using fish skin by crafting beautiful sequins is an excellent example of circular design as they also explains, "the development of these bio-sequins represents a significant step toward more sustainable design practices, offering a promising alternative to traditional, petroleum-based sequins" (Clavel et al., 2024, p. 18). All this academic literature, researchers indicated that with creative thinking and innovation techniques, "trash" can become highly valuable, also offering these innovative, eco-friendly materials encourages ethical consumption and gives shoppers beautiful, sustainable choices that do not harm the planet.

Chapter 3: Research Methodology

3.1. Research Approach: Arts-Based Action Research (ABAR)

I have selected ABAR as my main method. Jokela and Huhmarniemi (2018, p. 9–11) explain that in this arts-based action research method, art is not just the subject of inquiry. Instead, art is the main tool we use to disclose truths and bring about transformation. As my thesis involves a practical part on making jewelry from upcycled materials and it demonstrates that waste can be transformed into something beautiful or can be able to give a second life. By creating these accessories with leftover materials, the project aims to blend "beauty and functionality" (Jokela et al., 2025, p. 35) it means the art can attract consumers and invite them to accept new ideas regarding waste and fashion.

ABAR mixes with two approaches. One is it uses action research to solve real problems and involves cycles by planning, doing, observing, and reflecting. "Again, they do this by allowing readers and viewers to vicariously re-experience significant dimensions of human affairs through the use of aesthetic design elements."(Barone & Eisner, 2012, p. 23).

It means making art to facilitate our comprehension of intricate human experiences through art. In easy way I can explain that it is a method that involves by learning things through making, reflecting and taking action and all these make it suitable for design, fashion, and sustainable practice-based research. There are several reasons to choose this approach for my project.

ABAR is a method whose core concept is taking action. In this thesis, I am showcasing upcycled accessories with creative work is my "intervention" or "action." I want to encourage people to see waste differently. I am not just a researcher who watches a problem from the outside instead I chose to actively test a solution by doing the work myself and also arranging a workshop where I can involve people to do these kind of artistic work of making upcycled accessories.

Standard research has been using only text and numbers as common methods. However, Barone and Eisner (2012) contend that arts-based research can reveal things that are difficult to explain with just words, for example strong emotions. My inquiry is focused on the relationship between emotions and clothing. I am following a technique that reveals every small details, I learn

something new whenever I touch old or wasted textiles or I look at a stunning new creation made from trash. It gave me the feeling of satisfaction and fulfilled my heart that I am able to create a magic from waste.

In ABAR, the researcher is part of the study but not a separate one. This method helps me to utilize my skills, learn new crafts, and get new unique designs of jewelry, while also helping me to save money on materials which are an important part of this research. The whole journey of designing these upcycled accessories is important data, including my mistakes and my successes.

This ABAR method perfectly fits with sustainable fashion theories as Fletcher 2008 explained, "The result would be the cultivation, processing and promotion of a series of 'minority' fibers that, when taken together, amount to a majority." (Fletcher, 2008, p. 5). This means the fashion industry becomes more sustainable by using a wide variety of local, eco-friendly materials instead of relying on just one or two polluting ones. Likewise, authors explain, "Shaping Sustainable Fashion intends to demonstrate to fashion and textile design students, fashion designers in industry and fashion consumers that through the act of designing and the use of responsible patterns of consumption, textile waste can be avoided and reduced." (Gwilt & Rissanen, 2011, p. 14).

My research interests have two main goals, which are common in ABAR. Firstly, I want to understand the psychological feelings and the reasons that stop people from buying ethically, and how I can help them follow an ethical way and change their mindset. Secondly, I want to improve practice by creating a new creative model to help consumers care about sustainability. The main result I hope for is a real change in awareness for myself, my workshop participants, and the people who see my work while visiting my exhibition or read my thesis.

3.2. Created Data: My Artistic Process

I have given priority to deep descriptions, personal stories, and human emotions to understand the complex feelings surrounding waste and fashion. I am searching for find answer "how" and "why" rather than just "how many." To organize this information clearly, I have divided my qualitative data into two main categories. First one is created date which comes from my personal artistic

practice my personal notes. Second one is collected data which I gathered from others and workshop participants.



Figure 1: Art-Based Action Research cycles described by Timo Jokela and Huhmarniemi (2018).

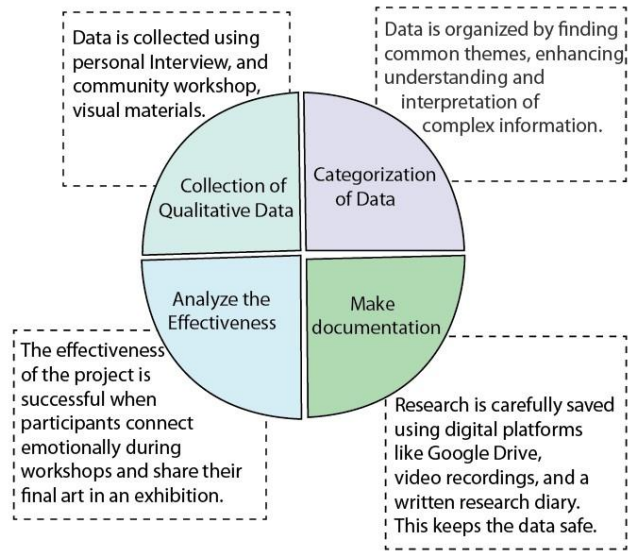


Figure 2: Derived research cycle. (Source: Sarah Hridi adapted from Timo Jokela and Huhmarniemi) 2026.

The Art-Based Action Research model developed by Timo Jokela & Huhmarniemi (2018) provides a general guide structure that artists can use to develop their projects through a process of research, practical work, and evaluation. This thesis uses an adapted version of their cycle which developed from (Jokela & Huhmarniemi, 2018, p. 15) model to solve the specific research problems with this research demonstrates that upcycled artwork created from waste materials acts as a form of visual storytelling. "Each cycle of art-based action research begins with planning, setting goals, and investigation of socio-cultural situations in the community or place. The next step of making action and art works can be defined as an intervention." (Jokela & Huhmarniemi, 2018, p. 15). The method establishes deep emotional bonds with community members while helps them feel true ownership of their participation. The derived research cycle through its adaptations provides a tailored method which utilizes local conditions to achieve the thesis objectives.

I have followed Patricia Leavy's (2017) ideas to express any creative process counts as research data. She points out that, "Artistic practice itself may be the inquiry"(Leavy, 2017, p. 191) .She

also explains that "these approaches allow us to tap into the unique capabilities of the arts as a way of knowing."(2017, p. 190). Artifacts can present as research data to any form of Arts which is made by humans, document, image, creative product which perform to express the meaning about social life, cultural values or human experience, these art objects are not quiet they speak, a way to show the results better than words can and they work as active tools that help us to learn and share information and also the process of making art helps us to understand the world. In my project, the physical objects that I have created are the heart of the research and the evidence I use to find answers. This category includes all the information regarding my own crafts and the process of creating artwork for sustainable fashion.

The Physical Artifacts are an important method of data collection for this study, as my project "Waste to Wearable" focuses on creating an upcycled accessories collection such as bracelets, earrings, rings, necklaces, and bags. These items are the most important physical evidence of my research data. I created each piece to showcase and also to get an answer to my research question about how waste materials become beautiful fashion items. For example, one piece of data is a necklace made from discarded old denim to enhance its beauty. I cut the fabric into a heart-shaped pendant and decorated it with colorful, hand-stitched flowers like French knots and bullion roses. The object proves that "trash" has value. The texture, weight, and style of this necklace are physical results of my experiments.

Process documentation is used while creating an upcycled accessories collection, as I kept a detailed digital diary to record every step of my artistic journey. Researchers explain that this method relies on the "Research-based starting points are also united by the cyclical progress of the project, alternating between planning, practical action, reflection, and evaluation" (Jokela et al., 2018, p. 12). It means proper documentation captures the continuous cycle of action, reflection, and learning in artistic work which transforms it into usable research material. Keeping records of this creative process is not considered an extra task but it is a central part of research itself. As this artistic journey was a really new experience for me and this helped me remember exactly what happened and how I felt while creating something beautiful with discarded materials that are considered waste. The diary has three parts through which I organize different aspects of the creative process:

Reflective notes are an important part of my "Created Data." They are depictions of my internal reflections, emotional responses, and artistic choices made in the course of the creation. The "invisible" work of the research is thus made visible through these notes. This kind of Reflection is crucial within ABAR, "Reflective data enables researchers to return to specific phases of the process, significant insights and situations that led to changes (Jokela & Huhmarniemi, 2025, p. 66). For instance, I gathered various materials with different textures and found out that not all fabrics could be used for all accessories. I committed mistakes, acquired knowledge through them, and then went back to find the material that would suit each item properly. Since my source of design is waste, I have to always think of the material first. The thread colors and waste fabrics I have are my limitations. There was a time while creating the jewelry, I got frustrated because some techniques were totally unknown to me and also a few colors did not match. Then, surprisingly, I got new ideas and became excited. All the feelings I have tried to record and reflections regarding these, hence, it is impossible for me to create a design just straight from my imagination. On the contrary, it takes a lot of brainstorming to come up with a design solution that works with the actual materials I have with me.

Visual documentation is another way to Create Data. Experts say "Documentation is needed for knowledge purposes, exhibitions, evaluation, reporting, and the planning of new projects." (Jokela & Huhmarniemi, 2018, p. 16). I have captured the collection of images and drawings that represent my working process. I rely on the power of these pictures to express the reality of the work in cases where words fail. For example, a picture showing old denim jeans called "Before" next to a picture documenting the finished bag called "After" that serves as a witness to the transfiguration. This way of presenting the work lets the audience see the very process of converting waste material into a product with a certain value.

Material Logs and Sourcing document, where I obtained my resources. To collect these resource materials, I relied on the Rovaniemi community. I collected materials through the Facebook group "*Roskalava Rovaniemi+ympäristökunnat*," The local people were very generous, donating unused threads, beads, buttons, and torn clothes. Also accepted leftovers from the University of Lapland students and teacher, and some items I have rescued from waste bins. Some valuable items I was also able to collect from the ESN recycling room such as thread, needle, glue, etc. According to

Niinimäki & Lohmann (2023, p. 9), detailed tracking of the products' or materials' whole supply chain must be transparent and traceable to ensure that the source of the materials is ethical.

3.3. Collected Data: The Workshop Plan: "From Waste to Wearable"

My main goal is to influence consumers to raise their Awareness and encourage them to make a habit of ethical consumption through Creative Practice. For my thesis to collect data through a qualitative research approach, I am planning to collect data. I will organize a creative workshop in Rovaniemi city with local people and immigrants and giving titled "From Waste to Wearable." This workshop acts as the primary intervention in my ABAR method. I plan to design this session to last for three hours and will involve a group of 10 participants. The structure of the workshop is carefully planned to guide participants and involves themselves creating beautiful jewellery from waste.

Firstly, I will welcome the participants and explain shortly about my project and ensure that everyone signs the Informed Consent Form. Then briefly explain and show a small presentation that shows the environmental problems caused by fast fashion waste. To test their initial perceptions, I will place the "raw materials"—which essentially look like trash—on a table. Before giving any instructions, I will ask the group a key question: "What do you see on this table? Is it trash or is it art?" This allows me to record their initial point of view about the materials before the creative work begins.

I want to inspire the participants and influence them to create and think playfully and let them believe every person has creative imagination which could help them to do art crafts. I will display my own upcycled collection to show them what is possible. I will then demonstrate two simple upcycling techniques to help them understand an easy way to twist broken wire to make ring or earring hooks, and how to cut old denim fabric to create flower shapes. The goal of this demonstration is to give participants the confidence that they can create beautiful items too. After this, the participants will use these upcycling techniques to create their own unique jewellery.

In art based research, when the researchers' experience, expertise and viewpoints assimilated with the research topic then the research become an extension of researchers identity, this personal connection is important because "Artistic expression remains a method of approaching alternative

ways of learning, while action research in teachers' self-reflective development is closely related to the ongoing discussion of artistic research as an artist's self-reflection, which is common in fine art academies as well as in a/r/tography in art education (Irwin & de Cosson 2004)." (Jokela, 2019, p. 600). Bangladesh has a multifaceted and diversified garments industry. The industry is not only about manufacturing clothes, but it is also a whole ecosystem. From the farmers who grow cotton to the whole supply chain. As a Bangladeshi fashion designer with a decade-long working portfolio, I have experienced the real scenario apart from the glamorous fashion industry. The wage gaps, wastage and environmental factors are even more severe than which is portrayed in the news outlets. A fashion designer's work is not limited to designing clothes in front of a computer screen. It is a dynamic ecosystem, from the sewing master who sews the dress to the foreign buyers as a synchronized machine operation. As a graduate student at the University of Lapland, Finland, I am in a unique position where I can see Finnish fashion consumption trends from an outsider's perspective. Which is, however, a world apart from the environmental decay in Bangladesh to a modern ZARA outlet in Helsinki. These gave me a new perspective to align with the sustainability principle which should promote sustainable practice irrespective of economic circumstances between both countries.

As a researcher, student and creative practitioner the term flexibility could be a key point. While retaining core value which came from long experience I have gained new values through my education and living in Finland. Simultaneously, my role as a workshop coordinator is to keep the balance between the research objective and participants' needs. My creative work "the upcycled accessories collection" remains the source of data and the output.

I will conduct a workshop in MoniNet, Rovaniemi on 10th February 2026. The participants will be mostly women with different nationalities' background. After the workshop, I will conduct semi-structured interviews with the participants to gather qualitative data. I have already prepared a questionnaire with 15 questions. Furthermore, the semi-structured format allows me to be flexible and ask follow-up questions based on the participants' answers. The interviews will focus on three key elements. Firstly, I will explore the perception of waste, to understand how participants feel when the useless materials are scaled into something worthy, as for example, I might ask, "Did you think about these materials as trash before the workshop?" Secondly, I will examine emotional value by observing if the act of making by own hand would create a stronger bond with the object,

there I could ask, "Does making this yourself, and is it feel more special to you than a store-bought item?" Finally, I will investigate future intentions to determine if this experience influences the participants' willingness to reduce consumption, for instance by asking, "Are you more likely to repair broken items at home after this session?"

3.4. Data Analysis and Visual Communication through Creative Exhibition

The research data employed a dual-method of qualitative approaches. Initially, the analytical framework would utilize thematic analysis, which consists of verbal and textual data. It will uncover and explore the stories of the participants and their personal emotions. Finally, the narrative analysis will interpret the stories embedded within physical materials and creative works, which is a tangible object. It will show the visual documentation and artifacts from the workshop

The creative workshops provided their output materials and documentation which served as essential evidence for analysis because the materials proved more valuable than just supporting the textual results (Barone & Eisner, 2012, p. 8). Each item told a story, held emotional connection and memories to hold through creating new things from your used or leftover fabrics or materials. For example, a jewelry set created from old denim which it not just an accessory, instead it represents many things to our mind that caring for things and keeping them in use. Another attractive part is that this jewelry is unique, it is not the same as those you can buy from regular shops then later throwing things away. To create these physical objects participants become more conscious on their own ideas about shopping and help them to realize more what is valuable, and what is considered waste.

The other method focused on visuals and the process of making of these upcycled jewelry. As a Researcher its part of my responsibility to observe and studied pictures from the workshops and see how the participated giving their focus and full effort to making these beautiful upcycle accessories and showcases how these trash turn into treasure. Each details record as a visual dairy and the participant every action of choosing the threads, the torn fabrics and how and which item they are making from broken jewel or which item that want to make with these material, all these actions of these participants were written down in a diary to help understand how we value materials and connect with objects emotionally.

My exhibition which will be held in Gallery Lyhty at the University of Lapland, from March 17th to April 1st 2026. This is my sustainable art and design project of upcycled accessories, the exhibition will display accessories made entirely from upcycled materials, which demonstrate that discarded items could be reclaimed as valuable design objects. Ultimately, the exhibition will serve as a tool to help participants re-evaluate their shopping habits and realize that sustainability and style can successfully go hand in hand.

3.4. Research Ethics Considerations

Acting ethically is one of the most important part of qualitative research which involve people. I followed the advice of Leavy (2017) and the University of Lapland's guidance for Informed Consent. I asked all participants to sign a paper consent form. This form explained that joining was voluntary and they could stop anytime. It explicitly asked for permission to use their quotes and photos in my thesis. Anonymity is a fundamental part of the ethical process in this research to protect the identity of all participants and for this, I protected the identity of my participants. In my thesis, I did not write "Sarah Smith said..." Instead, I wrote, "Participant 1 said, participant 2 said..." This will ensure their privacy and integrity. Permission for images was obtained to respect the intellectual property rights, as I was very careful with photos and images. I asked for two separate permissions, one for the photos of their faces and the other for the photos of their hands or objects. If a participant did not want their face to be shown, I will blur it or take a side profile to ensure the person cannot be identified clearly and in some cases, I only use photos of their hands. For data Security purposes, I kept all audio files, transcripts, and personal information on a password-protected computer drive. Only, I will have the password.

The research process consists of four major steps which are shown in Figure 3.1 through planning, creating and acting, observing, and reflecting. Overall, the diagram explains how outlines the research process from the first ideas to the final exhibition.

RESEARCH METHODOLOGY
ARTS-BASED ACTION RESEARCH (ABAR)

"Influence awareness through creative practice"

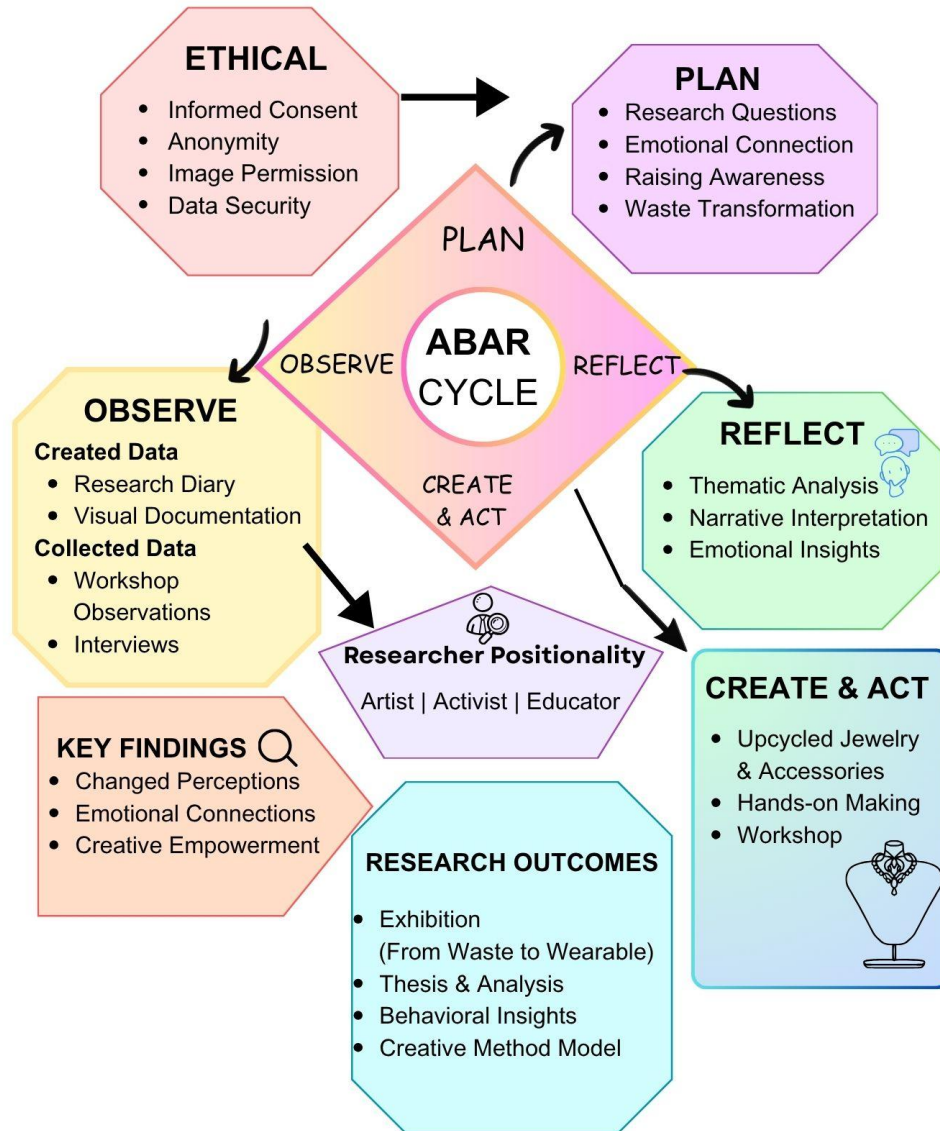


Figure 3.1: *The Arts-Based Action Research (ABAR) framework for the "Waste to Wearable" project.*

Note. This framework shows the cyclical relationship between creative practice and research outcomes. (Diagram Created by Sarah Tasnim Hridi, 2026).

Chapter 4: My Project

4.1. Initial Ideas

My inspiration for this project came from my own experiences working as a fashion designer in Bangladesh. I realized that there is a lot of waste in garment production. When I decided to come to Finland to further my education, I realized that even in Finland, where people are very concerned about the environment and they do more practice in sustainability, yet waste is a major problem. I wanted to prove that waste can actually be beautiful. I chose to create a collection of wearable items from waste materials. The title of this project is "*Waste to Wearable*" to clearly communicate the goal of giving new life to objects that people often discard. Moreover, since most people have busy lives and lack time to engage in upcycling, I wanted to create small pieces that showcase the beauty and simplicity of upcycling, while also grabbing the attention of women who love unique and eco-friendly accessories. In this chapter, I present the creative aspect of my thesis project, which consists of an upcycled collection, a community workshop, and an exhibition in Rovaniemi. These three aspects of the project constitute the practical side of my research methodology and next by analyzing these activities, the results show how the project achieves the objectives of my research, such as how we can create awareness and turn waste into value. In this project I wanted to find out, how upcycling creates emotional connections, how designers create awareness about sustainability, and how waste can turn into valuable material. These questions accompanied me in every step of upcycling, from collecting materials to the exhibition itself.

The journey of my project began from 2025 to 2026. I found my materials through a Facebook group called Roskalava Rovaniemi+ympäristökunnat, as well as donations from university students, recycling points, and people who answered my call for unused materials. Using these materials I started creating my project and making over fifty individual accessories, such as bracelets, earrings, rings, necklaces, bags, and keychains, which are unique and creative in their own ways. After completing my project, I conducted a workshop at MoniNet, where ten people from different cultural backgrounds designed their individual recycled jewelry. Finally, my project was exhibited at Gallery Lyhty, which is a part of the University of Lapland, from March 17 to April 1, 2026.

4.2. The Artistic Process: Transforming Waste into Wearable Art

The first things required before making the accessories were the most challenging stage that is gathering materials but finding materials became an important stage that gave me a meaningful experience and showed me a way to connect with people in the community. On March 12, 2025, I posted a message in the Facebook group *Roskalava Rovaniemi+ympäristökunnat*, asking the community to contribute to my project by donating any leftover, unused, or broken materials they had at home. Then I reposted it on March 17th, 2025, writing text in the Finnish language to grab more attention of local people and this time I got more responses. People were very supportive and donated materials such as threads, beads, pearls, buttons, laces, fabrics, and torn clothes. Some let me know that, they were happy to contribute to my project because they had been holding these materials for years without knowing what to do with them and every material had a story to tell, and those stories became part of the final creations. Sustainability is not just about the materials; it is also about the people. This experience taught me that sustainability is not just about materials but about people and relationships.



Figure 4.1: Screenshot of my Facebook posts in the Roskalava Rovaniemi+ympäristökunnat group on March 17, 2025, asking the local community to donate unused materials for my sustainable art project. (Screenshot by Sarah Tasnim Hridi)

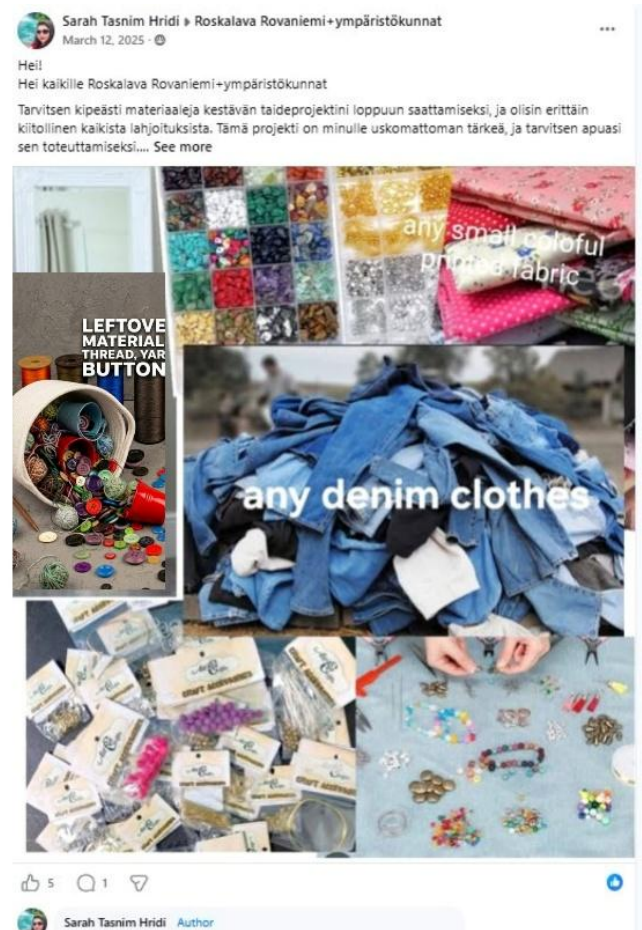


Figure 4.2: Screenshot of my Facebook post in the Roskalava Rovaniemi+ympäristökunnat group, March 12, 2025. (Screenshot by Sarah Tasnim Hridi)

As soon as I collected all the necessary materials, I started to design and make the accessories and for this I chose the decision to work entirely by hand. Moreover, I wanted to prove that it is possible to make something beautiful out of recycled materials without having expensive devices.

To create each item, I needed to complete a couple of stages – draw the idea on a paper, cut and assemble the material, and decorate the item and finally to creating one piece could take either hours or days depending on the technique used. I spent a significant amount of time developing this project and the whole process took several months. During this period, I crafted more than fifty unique accessories by hand, including bracelets, earrings, rings, necklaces, bags, and keychains and crafting some of these items was quite time-consuming, whereas others took only several hours to complete. I remember the long days at my desk, the frustration when a technique did not work and the effort and patience required then the excitement when I finally figured it out, and the satisfaction of holding a finished piece in my hands. For this project I had to learn embroidery and needle felting skills, wool crochet technique and I remember my initial attempt at needle felting had me pricking my fingers several times. When I tried crocheting, my hands felt awkward and all these skills were challenging.

The most important part I learned for sure was that upcycling fashion allows learning and transform myself as a maker. The project helped me to realize that the effort put into the process of handmade creation adds to the value of a product. The photos below reveal the process that led me to create different kinds of upcycled accessories and by sharing my experience, I would like to give other people some insights into how one can use recycled materials to make fashionable items. I include a step-by-step process about what kind of materials were needed for their creation, the techniques used, and the problems that arose during these process. I believe that my photos will help readers see that upcycling is quite an easy task to complete and encourage them to try these practices and move towards more sustainable crafts. In the paragraphs below, I explain the creation of the accessories pictured in the photo, including their materials and methods.

Heart Shape Denim Pendant Necklace: first, I have taken a piece of dark denim blue fabric for creating the heart-shaped pendant. Then move to the next step I choose colorful threads for to hand-stitched flowers like French knots and bullion roses. Further, to make the necklace, I have fitted a metal bail to the heart-shaped pendant, which is then put on a purple cord.

Stacked Embroidered Bangles: I have used a number of base bangles, which have been tightly wrapped with blue-colored fabric pieces along with denim. After wrapping, I have embroidered different designs and patterns of flowers and white daisies on the bangles. Some of the bangles have additional silver bells and beads added to them.

Denim Bracelet with Pink Wood Beads: I have taken a flat piece of light blue denim fabric that was cut into straps. Then next step ,I sewed several round pink painted wooden beads on top of denim straps then completed the bracelet with the addition of a silver metal clasp.

Knitted Rose Brooch: To create this piece, I took dusty pink-colored yarn and a crochet technique to create a layered rose shape with carefully wrapping it into a spiral form to give it the volume of a real flower then attached one transparent pink bead in the middle of the flower. At the last step I mounted the flower on a long strand of black string so it can be worn as a necklace.

Embroidered Fabric Ring: To make this ring, I used a small rectangular piece of bright yellow fabric as a base. I embroidered a vertical row of tiny roses in orange, pink, and purple, adding green leaves for detail. I then attached this fabric to a ring base. This small accessory acts as a



Figure 4.3: A selection of upcycled accessories from the "Waste to Wearable" collection, including denim bangles and bracelets, an embroidered finger ring, a wool crochet necklace, and a denim heart-shaped pendant.

Note. All products design and photography by Sarah Tasnim Hridi, 2026

piece of "wearable art," showing that even tiny fabric scraps can be used to make something beautiful.

Embroidered Fabric Ring: For this ring, I have used a rectangle of brightly yellow colored fabric then on top of fabric surface applied hand stitched with vertical rows of small roses, which were colored in orange, pink, and purple with green leaves in between them. Then it was attached to the ring band. It is an example of how any scrap fabric can be turned into a work of art by wearing it on your finger.

Denim Earrings with Mirror Detail: The earrings were created by cutting out tear-shaped pieces from old jeans using a template on paper then stainless steel hooks were attached after which a diamond-shaped mirror was adhered at the center as an elegant touch. The rest of the decoration consisted of pieces of pink fabric and paint details.

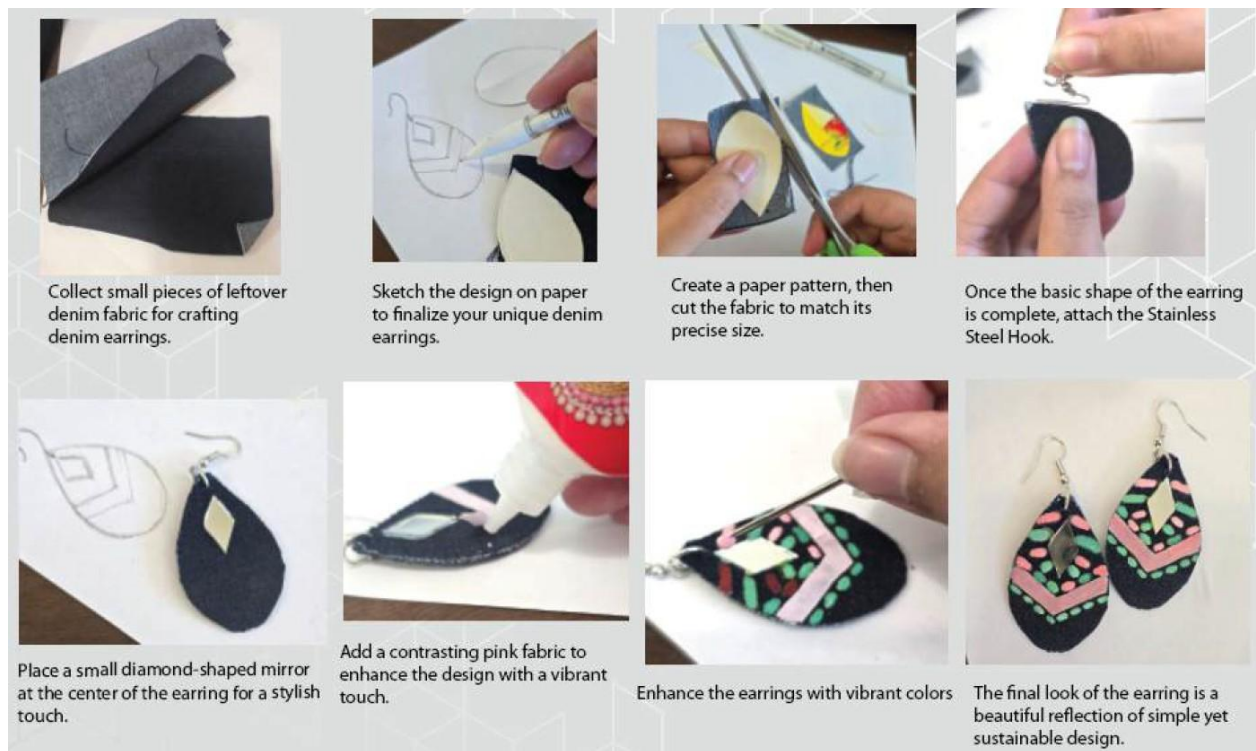


Figure 4.4: Step-by-step process of creating upcycled denim earrings, showing design sketching, fabric cutting, mirror attachment, and final assembly. (Design and photography by Sarah Tasnim Hridi, 2026.)

Handmade Wool Crochet Necklace: Handcrafted necklace made from wool, applied crochet technique using scrap yarn, following the principles of sustainability. The process starts with hand-making an extremely simple yet elegant base through crochet to show how things were done the old-fashioned way. After creating the base, the necklace has been decorated with pearls and studs.



Crocheted Wool Necklace Decorated with Pearls and Studs

Figure 4.5: Handmade wool crochet necklace made from leftover yarn and decorated with pearls and studs. (Design and photography by Sarah Tasnim Hridi, 2026).

Embroidered Cross-Body Bag: The flowers and mandala patterns were embroidered using various colors on the black wool felt material by hand. The process of lining the bags and sewing the pieces together was followed, after which metal rings and leather straps were used to make the piece wearable as a cross-body bag.



Figure 4.6: Hand-embroidered wool felt cross-body bag with flower and mandala patterns. (Design and photography by Sarah Tasnim Hridi, 2026.)

Embroidered Pearl Earrings and Ring: These accessories are created on white fabric and decorated with an embroidery technique that involves the application of French knots to create pink roses, giving a 3D effect. The earrings were finished off with teardrop-shaped pearls and stainless steel, whereas the ring has a bunch of roses.



Figure 4.7: Earrings and ring applied embroidery, finished with teardrop pearls. (Design and photography by Sarah Tasnim Hridi, 2026).

Upcycled Fabric Keychain: The keychain was made out of scraps of printed fabric. Firstly, I cut a doll figure in bright colors out of the scraps. Then I did some hand stitching, leaving an open space to stuff it with filling. After stuffing, I closed up the open space using stitches and fixed a key ring. As a result, I got a cute keychain that could be worn easily on keys.



Figure 4.8: Upcycled keychain. (Design and photography by Sarah Tasnim Hridi, 2026).

Upcycled Denim Tote Bag with Backpack Option: This bag is made from recycled denim and fabric collected from old clothing and these materials are used in different parts of the bag, such as the front and side pockets. I have designed a bag that can transform into a backpack as well as a tote bag, also to give it an ethnic vibe and unique design, I also attached embroidered floral motifs laces on the front.

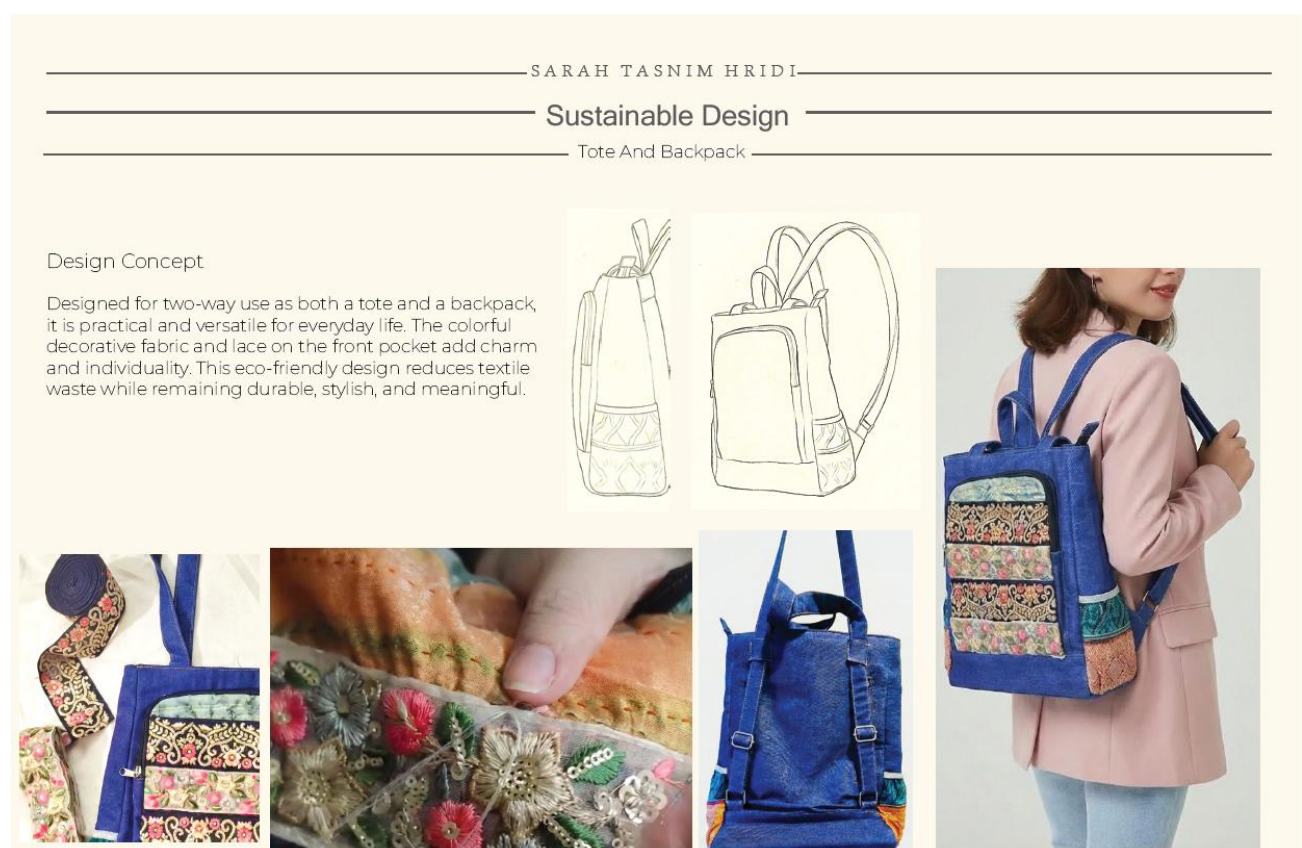


Figure 4.9: Upcycled denim tote bag with backpack option, shown on a model. The bag was designed and created by the author using leftover denim and fabric scraps. The image was enhanced using AI tools (Gemini) to better visualize the bag on a model. (Photo by Sarah Tasnim Hridi, enhanced with AI, 2026)

Denim Flower Embroidered Finger Ring: I selected some colorful yarn to create French knots and bullion roses on old denim. Once the embroidery was finished, I cut the denim into a perfect oval form and added felt to the back for stability then next I attached the embroidered piece to a stainless steel ring base and this unique and handmade creation that highlights how simple fabric

pieces can be transformed into jewelry. Lastly, I prepared a technical sheet so that readers can see the details and feel inspired to create their own.

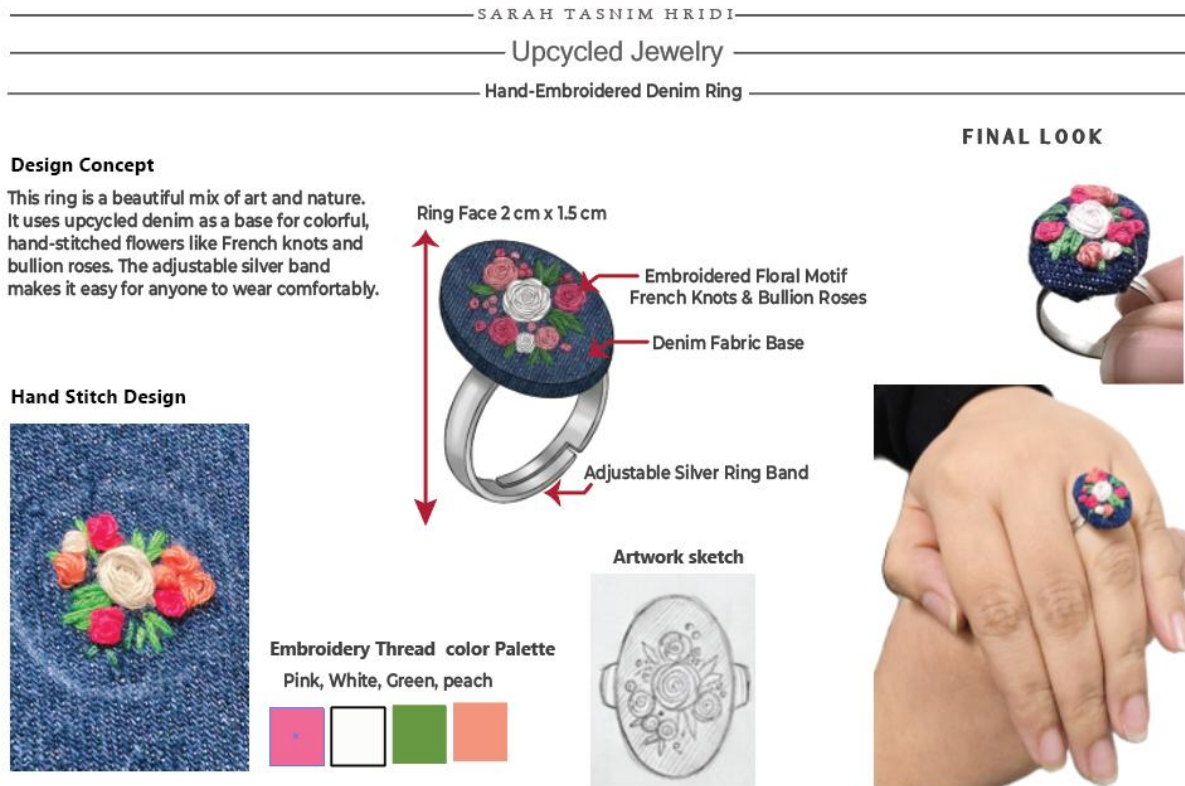


Figure 4.10: Technical sheet for the denim flower embroidered finger ring. (Design and photography by Sarah Tasnim Hridi, 2026).

In this journey of my creative process, I had maintain a detailed research diary where I recorded my reflections, challenges, and discoveries which I learned during these period, while designing with waste is very different from designing with new materials. Upcycling design works in reverse where I had to look at the materials first, then think about what can be made with it? This required a different kind of creativity, at the same time working with few resources demanded a higher degree of imagination and most challenge was figuring out how to turn these specific scraps into a meaningful design. All these detailed process of making, reflecting, mistake and correcting again is exactly what Arts-Based Action Research is about.

My sustainable design approaches in this project were inspired from the literature I reviewed in Chapter 2. In terms of source material, I used only what was available within the community of Rovaniemi. Ensuring that no new material was required and that there was zero transport emission also no impact on the environment, I used a slow-design approach, emphasizing quality and craftsmanship as well as durability. Finally, I have proven that waste could be prevented by utilizing reusable materials.

4.4. The Community Workshop: From Waste to Wearable

Inspired by the final outcome of my upcycled accessories collection, After that I decided to teach others how to upcycle and encourage to learn about sustainable fashion, I organized a workshop in the local community and titled "Waste to Wearables" and hosted it on February 10, 2026, at

MoniNet in Rovaniemi. What's more, I also created a workshop leaflet to find participants, and I posted it on social media groups and public notice boards. In the leaflet, I asked participants to bring any unused, broken, or leftover materials they had at home, such as fabric, jewelry pieces, buttons, and other small items. MoniNet is a community organization that focuses on promoting multiculturalism among immigrants, which makes it an excellent location for my event since it allowed me to gather individuals from various cultures. The workshop took place for three hours, and ten people participated. These participants came from Finland, Australia, Brazil, Sri Lanka, and Peru, with ages ranging from twenty to sixty years old.



Figure 4.12: Workshop leaflet for "Waste to Wearable." (Created by Sarah Tasnim Hridi using AI/Gemini, 2026)

The workshop consisted of five separate stages. I spent fifteen minutes in the first stage of the event to welcome participants and explain my research purpose after that the participants signed the informed consent form to confirm that their involvement in the research was voluntary, and they could discontinue the experiment whenever they wished to. I started my presentation with a short speech which explained how fast fashion creates environmental damage through its operations and along with I presented to the audience actual photographs which showed landfill waste and demonstrated how excessive natural resource consumption results in environmental



Figure 4.13: Workshop presentation and my upcycled work. (Photography by a workshop participant, 2026).

destruction. Importantly, I wanted to inspire them through this demonstration to select more sustainable products for their everyday activities. Afterward To test their initial perceptions, I placed the raw materials which I collected before lay on a table and asked them a key question: "What do you see on this table? Is it trash or is it art? These question examined their current understanding because it formed the basis of their creative work.



Figure 4.14: Participants selecting materials for their jewelry. (Photography by Sarah Tasnim Hridi, 2026)

The second phase of the experiment which lasted thirty minutes involved me displaying my upcycled jewelry collection to demonstrate its potential and on top of that I aimed to motivate them while showing them that they could transform waste materials into attractive products. The demonstration consisted of two basic methods first beginners learned to twist broken wire into ring and earring hooks and second they learned to cut old denim fabric into flower shapes. My purpose was to give participants the confidence that they could create beautiful items on their own. In the third phase, participants selected materials from the table for their jewelry creation work that continued for ninety minutes. My role during this phase was to facilitate, not to direct, but when participants approached me with questions I provided assistance while I urged them to develop their own artistic concepts through independent work. I observed their material handling skills, their mutual assistance behavior, and their concept development progress throughout the duration of the event. Besides this, I used photography to record the entire procedure. The things I saw created a strong impression on me. Surprisingly, participants who started the workshop looking uncertain became focused and engaged as they worked with the materials and they exchanged ideas with each other while, assisted each other in mastering challenging techniques and shared their accomplishments with one another.



Figure 4.15: Participants engaged and focused on making. (Photography by a workshop participant, 2026)

Then in the fourth phase, all participants displayed their creations and shared what they had made with excitement. I could see happiness on their face, as they expressed pride and surprise at what they had accomplished. After that we took a group photo.



Figure 4.16: Participants' finished upcycled jewelry and group photo at the end of the workshop. (Photography by a workshop participant, 2026)

In the last phase, I conducted semi-structured interviews with all workshop participants, and these interviews were audio-recorded. The interview questions were designed to answer my three research questions, and I obtained signed consent forms from all participants. The interviews lasted approximately ten minutes each and focused on three areas such participants' perceptions of waste, their emotional connection to the items they created, and their intentions for future sustainable



Figure 4.17: Post-workshop interviews with participants. (Photography by a workshop participant, 2026)

4.5. The Public Exhibition: Sharing with the Community

Finally, to share my "Waste to Wearable" collection with a wider audience and to invite viewers to think about waste and fashion in new ways, the creative part of my project was a public exhibition at Gallery Lyhty, located in first floor, F-building at the University of Lapland from March 17 to April 1, 2026. Leaflet and poster distributed in University premises and people have been invited to join.

I displayed my entire collection of upcycled accessories for the community to see and I arranged the pieces carefully to show the variety of materials and techniques I had used. The collection display used few white pedestals and a glass display cabinet which I positioned at large windows that provided views of the University of Lapland campus also the natural light in this area showcased the material colors and textures. I tried to organize into categories,

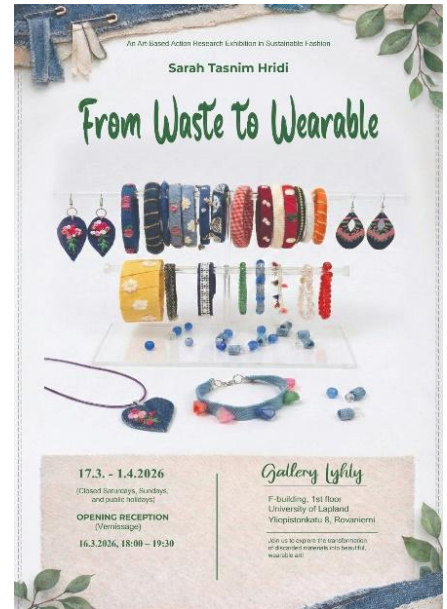


Figure 4.18: Exhibition leaflet for "Waste to Wearable" at Gallery Lyhty. (Created by Sarah Tasnim Hridi using Gemini, 2026)

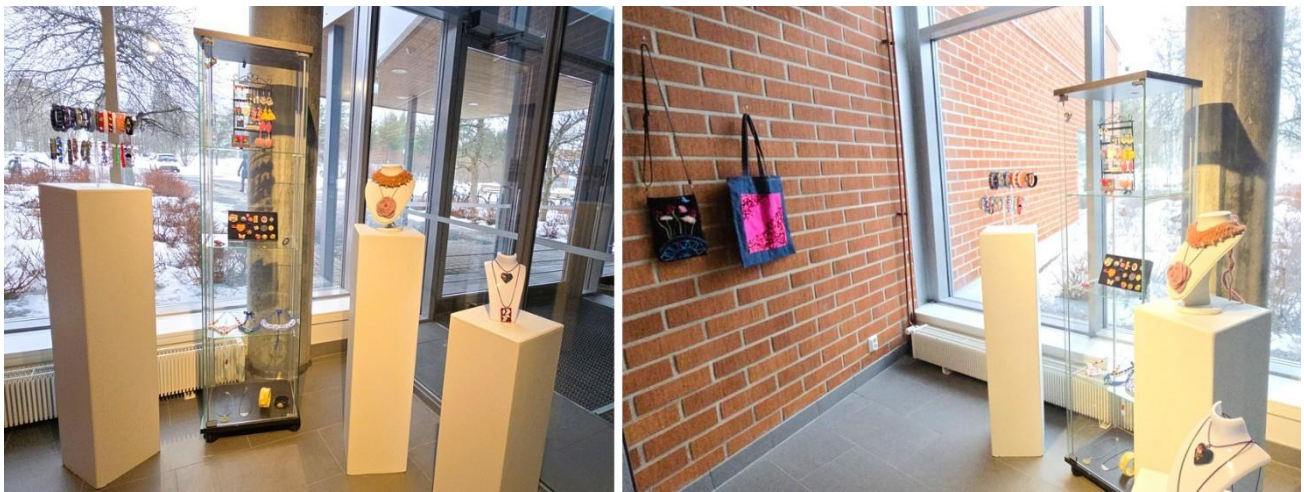


Figure 4.19: The "Waste to Wearable" exhibition at Gallery Lyhty, University of Lapland, showing the upcycled accessories collection displayed in a gallery setting. (Photography by Sarah Tasnim Hridi, March 2026)

I arranged denim bracelets and bangles in one pedestal and the necklaces and earrings which I displayed on jewelry busts and in glass display cabinet. I displayed the hand-embroidered cross body bag, tote bag on side of wall, so viewers could see the detail of the embroidery. The gallery space allowed viewers to walk around the displays and examine the pieces up close, seeing the craftsmanship and the stories embedded in each item.



Figure 4.20: Close-up view of the upcycled accessories displayed at Gallery Lyhty, showing the detail and craftsmanship of each item. (Photography by Sarah Tasnim Hridi, March 2026)



Figure 4.21: Exhibition Display and the Researcher at Gallery Lyhty

Note. All products designed by Sarah Tasnim Hridi. Photography by Reema, 2026.

Chapter 5: Analyzing Data

This analysis draws on data from nine participants who joined my “Waste to Wearable” workshop on February 10, 2026, at MoniNet in Rovaniemi. I completed short semi-structured interviews with all workshop participants after the event, and the interviews lasted approximately ten minutes because the participants allowed me to record their voices. Thus, their answers provide valuable qualitative data. The purpose of the analysis is to find the answer to three research questions. First, how upcycling fashion creates emotional connections. Second, how designers can raise awareness about sustainability through creative practice and third, how waste can be turned into something valuable. Here I organize the analysis into four main themes that emerged from the interviews: emotional connection through upcycling, shifting perceptions of waste, transforming waste into value, and the designer's role as facilitator and each theme is discussed in relation to the literature I reviewed in Chapter 2.

To protect the participant's privacy and confidentiality, which is an ethical requirement of my research, I have removed all real names and any identifying information, which I explain in the methodology chapter. I mentioned Participant 1 through Participant 9 in this thesis. Workshop participants came from diverse backgrounds, such as Finnish locals as well as immigrants from Australia, Brazil, Sri Lanka, Peru, and Canada, ranging in age from their twenties to their sixties, these shows that interest in sustainability is shared across cultures and age groups. Every quote presented in this chapter comes directly from the interviews, and I kept the original meaning intact, but remove repeated or unnecessary words for clarity.

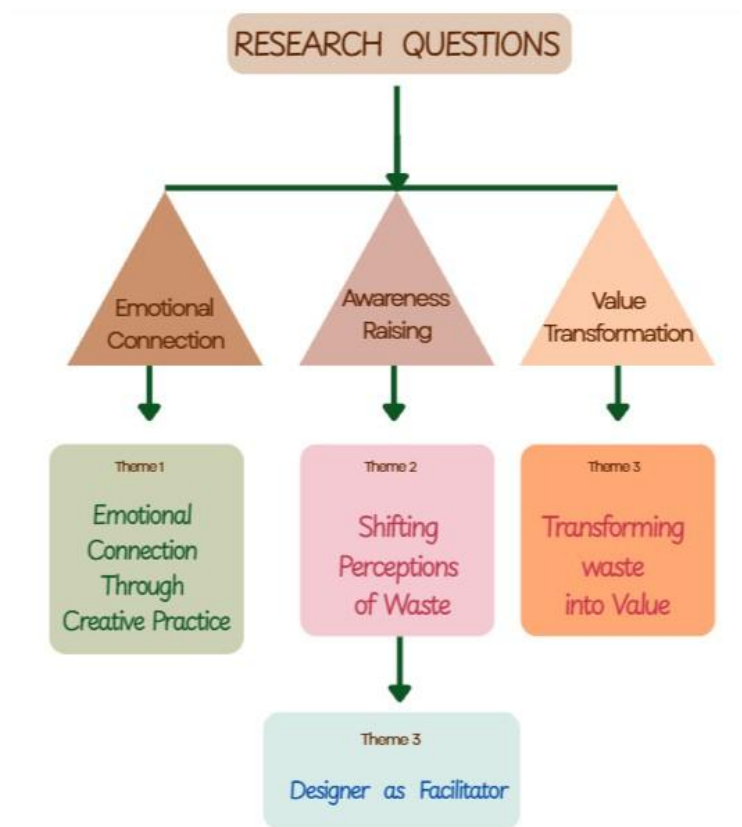


Figure 5.1: Diagram showing the four themes that emerged from the analysis and their connection to the research questions. (Created by Sarah Tasnim Hridi, 2026)

5.1. Emotional Connection through Creative Practice

The strongest theme that emerged from the interview is the personal attachment participants develop towards the objects they created, and provides an answer to my initial research question, which investigates how upcycling establishes emotional connections between people. All nine participants expressed that their handcrafted items brought them greater value than the products available in stores. I found there were a few reasons for this strong connection, such as pride in creating it, spending considerable time and effort in crafting it, the environmental benefits it offers, and the uniqueness of the final product.

Pride in Personal Creation developed during discussions concerning their creations, all participants showed the same emotions of pride, not related to the actual quality of the object, but because they had created it. They felt an accomplishment whenever they produced something on their own and not from the products purchased at the stores. Participant 1 shared her thoughts by saying, "This piece would be more special to me than something I bought from a store, since I made it myself, and also because it has been upcycled, so it is a good choice contributing towards the preservation of the natural environment." This response shows there are two levels of emotional attachment here. First, there is the pride in creating something oneself, and Second, the participants felt happy when they realized that their art project would help save the planet from environmental pollution. Participant 9 had an almost identical view to this, stressing the immense emotional value in her craft. She stated, "Making something entirely new by my own hand from something which was thrown away gives me a sense of pride to wear it." I observed term "pride" is found throughout numerous interviews, which indicates that upcycling plays a significant role as a source of self-respect and personal fulfillment. Another Participant 8 also responded with the same idea, saying that, "I feel really connected to the item because I put time and effort into it, and that makes it more meaningful than something store-bought. It is one of a kind and has a personal story behind it." Surprisingly Participant 5 expressed exact similar sentiment, stated, "I think it is unique because I made it. So it is valuable for myself." She emphasized that the word "unique" here and all these answers reveal that, a handmade creation has a unique history, reflecting the creator's personal approach, whereas a manufactured bulk item is likely to be repeated thousands of times across the planet.

According to Participant 3, creating things can lead to her realizing their actual worth. She said, "Having this first-hand experience helps you realize how long things can take to make or how delicate something is. So then you feel that it makes sense why some handmade things cost a lot more. Because there is someone putting the time into it. When you spend the time to make it, you don't want it to break so easily." This response demonstrates that emotional connection functions as a tangible element that two people can examine. When people feel connected to an object, they are more likely to care for it, protect it, and keep it for a longer time. All these findings confirmed that emotional durability theory exists in actual life.

In my own research diary, I recorded a similar experience in my own creative practice. There is a description of the difficulties I had in creating something that took me many days and required me to learn a new sewing technique, during which I made many mistakes. But when I finally finished my creation, I wrote that I felt the piece I had created somehow became a part of me, embodying my hours of hard work. My experience is very similar to that of my participants.

The value of time and effort was identified when the emotional attachment of participants was based on the efforts and time they put into creating something. Participants mentioned that since they put in a lot of effort to create something, because of this they felt more connected to it than anything else they might have bought. Participant 3 then added that "When you spend the time to make it, then you don't want it to break so easily. You want to make sure it is well made, and you want to look after it." It is interesting how this answer highlights one particular psychological phenomenon. It shows that the act of spending your own time and effort results in feelings of ownership that go far beyond simple possession, and it helps to develop an emotional connection. Participant 2 provided an interesting perspective on this as well, she said, "I think the one that I would buy in a store has value because I worked for the money. I go to work, and I get money. So I can buy it. But the thing I made for myself has value because I made it. I did something for it to happen. So both are special, but in a different way." With this answer, I got an interesting observation because it clearly demonstrates that participants did not reject store-bought products as such. They knew that there was value in personal effort in creating such products, but they also put effort into earning money used in purchasing such things.

Emotional Value in Sustainability connects people deeply to upcycled items, so they keep them longer. The participants explain their perspective on how their emotions towards their work have become even more valuable because of its sustainability. Not only it pleased to create something beautiful, but they were also pleased that they did something good for the Earth. According to Participant 1," because it has been upcycled so it's a good choice contributing towards the preservation of the natural environment." This response implies that the choice of the eco-friendly product made the product more meaningful for her. Participant 9 said, "Certainly, I feel pride and a sense of satisfaction that I could contribute to creating something which is sustainable and somehow, although slightly, help mother earth." Her reflection also gives me the impression that this simple act made her feel like she could make a change, as she used the word "slightly" quite genuinely, as she knew that one piece of jewelry could not solve the climate crisis, but it was a small step in the right direction.

Another similar point from Participant 4, who shared her thoughts by saying, "To protect the environment, as you said, you have given us a very good introduction about the environment, how these things can pollute and how they are used by the water, and all the stuff. So I will think about the environment. I will take use of it for myself." This response shows the workshop, which I had organized and provided a combination of information and hands-on experience, was effective, considering that participants did not just hear about the environmental situation and its effect, but they actively engaged in solving it through creative practice. The information about pollution and water use provided a context for their actions, making those actions feel more meaningful.

5.2. Shifting Perceptions of Waste

The second theme that came out during the interview process was the change in perspective that the participants had regarding waste, which directly responds to the second research question of mine, which addresses how designers can employ creativity to draw attention to issues of sustainability. It is evident from the interview results that by using waste materials for artistic creation, participants started to think differently about them. At the beginning of the workshop, participants considered these materials to be just trash, but it also confused them about why this material is here and how it can be turned into something useful. However, afterward, they began to perceive them as opportunities.

From trash to treasure means turning waste into beautiful accessories. As my project concept is to see waste in a new perspective, trash to treasure, due to this, I have given my workshop name "Waste to Wearable." To find out what participants' thoughts were at the beginning of the workshop, I placed the raw materials on a table and asked participants what they saw. I had observed a confused look on their faces, and their initial responses showed that they had not previously considered waste as a creative resource. However, as they looked more closely and experimented with the materials, their perceptions began to change. This is clearly shown by Participant 1, who stated, "On the first look, the materials did seem like waste since they were not usable. But then, looking more closely, some of them had parts that were still good and could be used for something else." The fact that there was a change in perception even before participants began the process of creating shows that simply giving them enough time to examine the discarded objects for making something out of them. It means that observing objects with a purpose can transform their point of view. Here, I observed that Participant 9 was quite surprised at her revelations during the activity. According to Participant 9 "I was very surprised when I got to know how sustainable productions could create from wastage. It was an eye opening event for me and I learned many new things." her expression "eye opening event" is noteworthy since it demonstrates that there was indeed an experience that enlightened the participant and changed her view of the situation and learning through experience is always more effective than any other means of education. In this case, the experiential learning process was far more productive than merely seeing information on pollution or watching a documentary.

Another interviewee showed honesty in reflecting upon her past actions and present mindset, and this one is Participant 5. As she puts it, "Before, I considered it waste. In my home, when something is broken, I put it in the trash. And now I have another perspective. I don't know if I am going to change, but I have another perspective." This honest answer is crucial because it clearly shows that her newfound realization does not necessarily lead to changed behaviors and also reminds me that change is not easy. Habits tend to be hard to shake off, but the important thing here is that she now has "another perspective." The next Participant 2, has some experience in crafting before coming to this workshop, and she still found her perspective changed as she replied, "Even though I usually buy stuff from the store for the projects I am making, now maybe I am considering more if I already have an item I can use for that purpose." From this, it can be seen that the workshop's impact

extended even to participants who had previously engaged in crafting activities. The sixth participant's initial reaction to the material was stated in a humorous manner. She said, "I used the word like a 'chunk,' like an 'oh, interesting chunk,' kind of like a treasure. Then I was like, 'Oh my god, can I have the imagination to make something nice?'" This indicates that even though some participants lacked confidence in their ability to create something, they saw some value in the material.

The challenge of imagination requires turning waste into unique designs. I observed that most of the participants stated that the hardest thing during the workshop was not how complicated the process of manufacturing is, but rather the mental process of figuring out what to make. They are struggling to find out what they could make with the material lying on the table that was once considered waste or useless. It shows that upcycling requires not only manual skills but also creative thinking. Participant 1 pointed out that, "One of the most challenging parts, in my view, would be coming up with an idea of what item could be made from those materials. Another challenge would be to determine how to make it." In the answer provided, there is a clear distinction between the two challenges faced by the participant, which are the challenge of having an idea and the challenge of implementation. Participant 2 had a similar view when she said, "The most challenging part is figuring out what to do. I feel like it's the hardest, because you can have just like anything you want. You have to use things that you're given. So you have to use a little bit of creativity to come up with things to make." This quote highlights a major distinction between upcycling and traditional creation. When creating a general artwork or traditional creation, the first step is to finalize the design, then look for appropriate materials to complete it, and you also have full freedom of choice. However, with upcycling, you are left with materials, and it is up to your imagination to discover their potential.

This was a common concern raised by Participant 3 as she said, "Seeing how they can attach together. You have three different things, but you don't know how to put them together in one piece. The types of material, one is metal, one is soft fabric and one is fluffy. You are not sure how to attach them together, or maybe they are better in a different combination." This illustrates that problem-solving is integral to upcycling crafts. In the initial workshop process, all Participants needed not only to come up with their idea but also to incorporate the materials into their designs,

and this was the most challenging part to understand and at the same it was also part of what made the experience rewarding.

The problem faced by participant 6 was one of "lack of imagination. It's challenging to try to imagine what can I make with these? I see other people already making things and I'm like, I'm just trying to do something now." This honest answer highlights that some participants lacked confidence due to a lack of creativity, and as a result, they felt inferior compared to those around them. This finding implies that, apart from showing techniques in the workshop, participants should be motivated to develop confidence in their creativity. A similar answer regarding the creative aspect was also raised by Participant 5, who said, "The creative part is challenging because I don't have skills, or I don't think I have." It is clear from the answer above that doubt may prevent a person from doing recycling work and most people think that they are not creative enough, that they lack the skills, that they cannot do anything. My workshop proved that with some help and positive reinforcement, those who lacked confidence in their creative abilities could achieve success.

In the workshop, the techniques I demonstrated and my own creative project displayed in front of them helped participants solve this problem. Participant 3 shared her thoughts, "I was inspired by the examples that were there. Looking through the items and putting them together with the broken things I brought, then starting to put them next to each other and imagining how they would look. More ideas come at the beginning when it is a bit blank." This statement, which shows what can be done, allows participants to shift from a blank state to a creative state and provides initial inspiration.

Changed intentions and behaviors guide people toward buying sustainable fashion. I queried about any changes in their perception of waste at the end of my workshop, and almost all participants reported having changed their perceptions. Furthermore, most indicated an intention to modify their behavior in the future. Participant 1 committed herself wholeheartedly, declaring that she, "I will no longer throw things right away when they are broken. I would try to upcycle or repair and reuse them." Which shows a definite promise to change her lifestyle. Participant 1 has gained a new perspective and also the conviction to take action. Another Participant 4 said, "Now I will save them. I will make new things because I was inspired by you." With this, it shows a particularly

powerful message because it directly credits the workshop with inspiring a change in behavior, such that the word "inspired" is significant. She was not just informed or taught, she was also inspired. This is the power of creative practice as a tool for raising awareness.

It should be noted that not everyone felt comfortable enough to undertake upcycling work independently. In particular, Participant 2 shared that she finds it challenging to initiate her own upcycling projects and that she might not feel interested in working alone at home as she stated, "I have a hard time starting these upcycling projects myself, but this communal workshop was a nice experience. It encourages making stuff yourself. I would come to another workshop to bring things from home and craft together with other people. I wouldn't make something at home myself." This is an important finding that I learned from her answer that for some people, the social aspect of making is essential as they felt excited and encouraged to share the creative experience, which provided motivation that they might not have on their own.

Participant 7 shared her honest opinion about the need for proper tools and materials and being part of the community to practice upcycling crafts, as she remarked, "I like this very much, but I don't have the tools at home to do this. I could not do this at home." It shows that tool availability is another hindrance to upcycling. The fact that upcycling does not require expensive equipment but does require some basic tools like pliers, wire cutters, and needles, and that not everyone has these at home, means that involvement workshops are a better option for many who need free access to tools as well as social support. This underscores the community's role in fostering sustainable actions. One is more likely to be inspired by one's values, knowing that others think alike.

Beyond the workshop participants, I also found another valuable source of data that shows the exhibition's impact on people who visited the exhibition and these visitors did not participate in the workshop but attended the public exhibition at Gallery Lyhty, which provided strong evidence that upcycling shifts perceptions of waste as they shared their thoughts through handwritten comments and feedback. During the exhibition, many expressed surprise that the beautiful accessories were made from discarded materials for example, one comment read, "I couldn't believe it was a waste," with the visitor adding, "I bet these would sell very well." Another visitor noted the items were so beautiful that they wished to wear them. Someone else wrote, "I like the

finger ring collection very much—I would love to wear them and try to create one for myself." Several visitors even expressed a desire to buy the pieces and all this feedback confirms that upcycling can effectively change consumer attitudes, transforming waste into a valuable product.

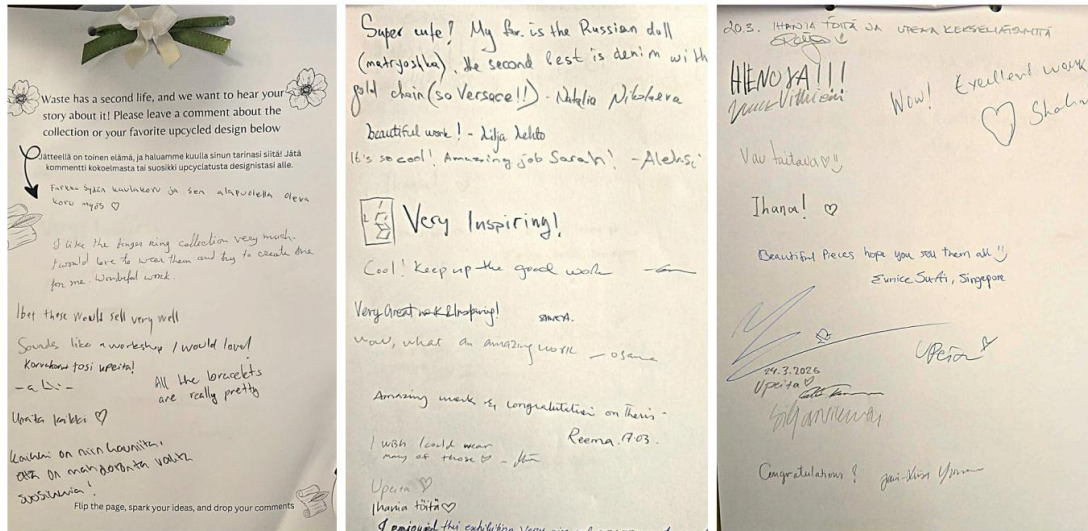


Figure 5.2: Handwritten Visitor Comments from the "Waste to Wearable" Exhibition
Note. This collage shows a selection of feedback from visitors at Gallery Lyhty. The comments highlight themes of surprise, emotional connection, and increased awareness of sustainable fashion. Photo by Sarah Tasnim Hridi, 2026.

5.3. Transforming Waste into Value

One of the major themes for data analysis is value transformation that emerged as an important outcome of the workshop by allowing participants to transition from a theoretical to a practical understanding of sustainability. The "Waste to Wearable" activity enabled participants to transform waste into useful items, also addressing the research question by demonstrating how to create value from fashion waste. The designs created by participants helped them to identify various forms of value, including emotional, environmental, aesthetic, and economic value. Most importantly, promoted more sustainable consumption.

Economic value was explored during the participant interviews, I asked the participants how much they would pay for a similar item in a shop and each participant gave individual responses that reflected their understanding of economic value; these responses indicate that participants

perceived their artwork to have monetary value, even if their willingness to pay varied. The answer I got from participant 1 was, "Even if it was slightly more than the regular items in the shop, I would pay more because it is more sustainable." which indicates that some consumer willing to pay an extra price because of a sustainable product, and also there is demand for recycled clothing among environmentally conscious customers. Participant 9 supported this point by stating, "I believe it is a bit difficult to find these items in regular stores. If I find something distinguished like the jewelry we made from upcycled materials, I wouldn't mind paying a little extra, as it is sustainable." This means rarity and distinctiveness play an important role in determining economic worth, as uniqueness can command a higher price.

Table 5.1 Summary of participant responses by theme.

Note. Created by Sarah Tasnim Hridi, 2026.

Key Finding	Participant Responses	No. of Participants
Emotional connection	Handmade item is more special than a store-bought	8 out of 9
Shifted perception of waste	Now sees waste as potential, not trash	8 out of 9
Willingness to wear self-made items	Yes, with pride	9 out of 9
Interest in upcycling at home	Yes, or maybe with community help	7 out of 9
Upcycled fashion can compete with fast fashion	Mixed views (some yes, some no, some maybe)	4 yes, 3 no, 2 maybe
Environmental satisfaction	Felt proud to do something good for the planet and "help mother earth.	9 out of 9
Learning a new skill	Felt empowered and more confident after learning how to make jewelry.	9 out of 9
Social and community connection	Enjoyed the group feeling and sharing the creative space with others.	9 out of 9

I have found that Participant 2 was hesitant to answer this question, as she thought her skill was not up to the mark, "I wouldn't pay very high. Maybe a few euros. But maybe more for a

handcrafted item that has been made by a person who is especially skilled." It indicates that talent and craftsmanship attract a higher price tag. Not all hand-made pieces are created equal. In contrast, participant 6 estimated her piece would be worth about eight euros. She said, "I think this wouldn't be expensive because this is obviously a quite cheap thing with this plastic piece. So I think it would be like 8 euros or something." These answers indicate the materials were taken into consideration when valuing their work. Since the plastic material is inexpensive, the whole product will be inexpensive too, such an estimation is quite realistic.

Participant 3 informed that this upcycle workshop helped participants understand why handmade products were more expensive, as she 3 stated, "Having this first-hand experience helps you realize how long things can take to make or how delicate something is. So then you feel that it makes sense why some handmade things cost a lot more. Because someone is putting the time into it. When you spend the time to make it, then you don't want it to break so easily." This is an important finding as it shows that this workshop activity helped participants to learn about the effort behind handmade products, time, skill and physical work required to create products.

Environmental value serves as the foundation of this upcycling project. The core ambition and idea behind my recycling and upcycling project is to raise environmental awareness with a sincere commitment to sustainability and a genuine desire to protect the environment. The participants who participated in the workshop activities are able to identify and realize the value of protecting the environment. In addition, they also understood that their creative work provides a personalized satisfaction that they are doing their part to protect the planet. The creative work brings mental satisfaction by creating something new which is environmentally sustainable, commented by participants. Participant 1 stated that her piece was valuable because she did something which was "a good choice contributing towards the preservation of the natural environment." This response indicates that she viewed her action is a small part of a larger effort to protect the natural resources. Her small act has a deep impact on the whole ecosystem. Participant number 4 noted that she never thought about the relationship between the clothing and the industries that have a negative environmental impact. However, after the workshop, she said, "I use it for myself." This response shows that she incorporated the idea of environmental protection. It was not just something she had a very vague idea of but it became part of her own thinking.

Participant 9 said she felt "a sense of satisfaction that I could contribute to create something which is sustainable and somehow, although slightly, help mother earth." The phrase "help mother earth" is heartwarming because it shows that even a small positive action can perhaps give satisfaction to make a difference, however small it is, as the word "slightly" is an honest confession. She knew that making one piece of jewelry would not make much of a difference in the climate crisis. But it was a small step in the right direction, and that small step gave her satisfaction.

Throughout the workshop the aesthetic value of upcycled products was evident. Participants were creating the pieces with their own creativity and imagination, also building a sense of pride from creating something beautiful to look at and comfortable to wear.

Participant 1 described her piece as "different but beautiful." Participant 3 announced that she would wear her earrings because they "look good." Participant 6, despite calling her creation "weirdly funny and enjoyed the process which is a new experience," still thought it was "cute." These responses show rather than environmental friendliness, the objects can meet present-day aesthetic standards and attractiveness.

Participant 2 noted that although she participated the whole process but her creation did not look like it was made from recycled materials. She also added, "A lot of things I have seen before that are made from recycled materials, look like they are made from old stuff. But this time I felt like I could make something really pretty that doesn't look like upcycled from old materials and has a fresh look." Because it challenges a common perception about sustainable fashion. Many people assume that sustainable fashion is not very attractive, that they have sacrificed style for ethics. However, my workshop showed that this is not entirely true. Upcycled fashion can hold aesthetic standards and can be comparable to conventionally produced fashion products.

Economic barriers and future possibilities affect the pricing of upcycled accessories. The analysis also reveals the balance between different forms of value. For example, the economic value of upcycled products is limited by the fact that it is almost impossible for mass production and handcrafted products are time-consuming, as the selling price of my pieces could be much higher than the regular products if I consider the labor cost. In this case, the market appeal will diminish. On the other hand, if I price them lower, it would not value the labor cost appropriately. Participant 2 pointed this out exactly when she said, "I still think at this point it is not profitable enough to

compete with fast fashion. So it would be just a hobby, but I hope in the future it can become a success." This response reflects the reality of current upcycle operations which is in a different space than fast fashion. Instead of direct competition, upcycled products could be an alternative practice that adds emotional and awareness value. Participant 5 similarly said, "I think it is pretty hard, but I think there is a market for this as well." By this response, it is obvious that there are challenges as well as it is also established that there is a place for upcycled fashion in the market, even if it cannot fully replace fast fashion.

Participant 7 echoed a similar response, "I don't know, perhaps it depends on price and the quality of products." It means the practical challenges of scaling upcycling to compete with mass production. Upcycling is a labor-intensive industry and each piece is unique feature. That makes it a niche product, which is difficult to produce in larger quantities in a low price and cater to substantial consumers. The negative to mixed response about marketing and selling reflects the real scenario that in real life upcycled fashion faces significant structural and economic barriers. However, the participants' recognition that there is a value in upcycled goods, in the special growing segment of buyers which suggests that upcycling has a role to play in a more sustainable fashion future. As Participant 9 said, "Many great inventions and innovations happened from just a hobby. Assuming that, bigger clothing and accessories brands promote the upcycled products in their showrooms with government incentives. It would certainly compete with fast fashion or new trends." It points toward an important direction for future research and policymakers. The upcycling products may never fully substitute fast fashion, even though, with institutional support, it could become a meaningful alternative.

5.4. The Role of the Designer as Facilitator

This is the final analysis related to my role as a designer. The second question arises from the research about how a designer can raise awareness about sustainability by the use of creative practice. Throughout the project and workshop, I learned that the designer's role is not only limited to designing products but also expedite all other aspect of the creative process.

Setting the conditions for creativity inspires new ways to upcycle materials. As a workshop coordinator, my first priority to set the environment warm, open and friendly that creativity could nurture. I have collected wide range of materials from different sources and demonstrate simple

techniques. I talked to participants about the objective of the research and how the workshop is an integral part of my research. I tried to create a supportive environment where all the participants feel free to experiment to flourish their creativity and make mistakes.

Participants became enthusiastic that there is no limit or boundaries and just unleashed their imagination and creativity which was really appreciated. Participant 2 said, "There was a nice selection of different materials to use and I was thinking outside the box by using those materials." Participant 3 stated that she was inspired by the workshop coordinator's creation as examples which was the stepping stone. Participant 4 added, "I never thought that I could make anything by myself but I got inspired by you and other participants and I was amazed by my final product."

Guiding without directing allows participants to discover their own upcycling ideas. The motto during the workshop and hands-on phase was to guide and help (when asked) the participants but never restrict their imagination and never put any boundaries. I encouraged them to develop their own ideas. This approach belongs to ABAR research, which emphasizes active creation and participation by the participants to create something which is not restricted by anyone. Certainly not in any research framework. Participant 3 describe how this worked: "initially I was putting the items together randomly and copying other but over time more and more ideas keep coming into my head". It shows that the participants were developing their own creative ideas, not merely copying the researcher's examples.

Providing emotional support gives participants the confidence to create upcycled art. The emotional support and encouragement is crucial to a successful workshop. At the beginning of the workshop many participants were in self-doubt. Some participants even felt insecure about their creative and handicrafts ability. Participant 6 said, "Oh my God, do I really have to make those from my imagination or I just copy from others or internet? I do not think I have enough imagination to make something nice." Participant 5 said, "Both the creative and handicrafts part were challenging because I do not have the skill."

By the end of the workshop, participant 5 created a piece and was proudly saying, "I think I can show this to other people and proudly wear it. I am feeling emotionally connected with the piece I just made by myself." From self-doubt to self-belief and eventually pride, that shows that the designers can infuse confidence, not only just teach the skills.

In this project, I also play the role of the designer and fulfill the responsibility as which changed from a traditional creator to a facilitator as shown in **Figure 5.3**.

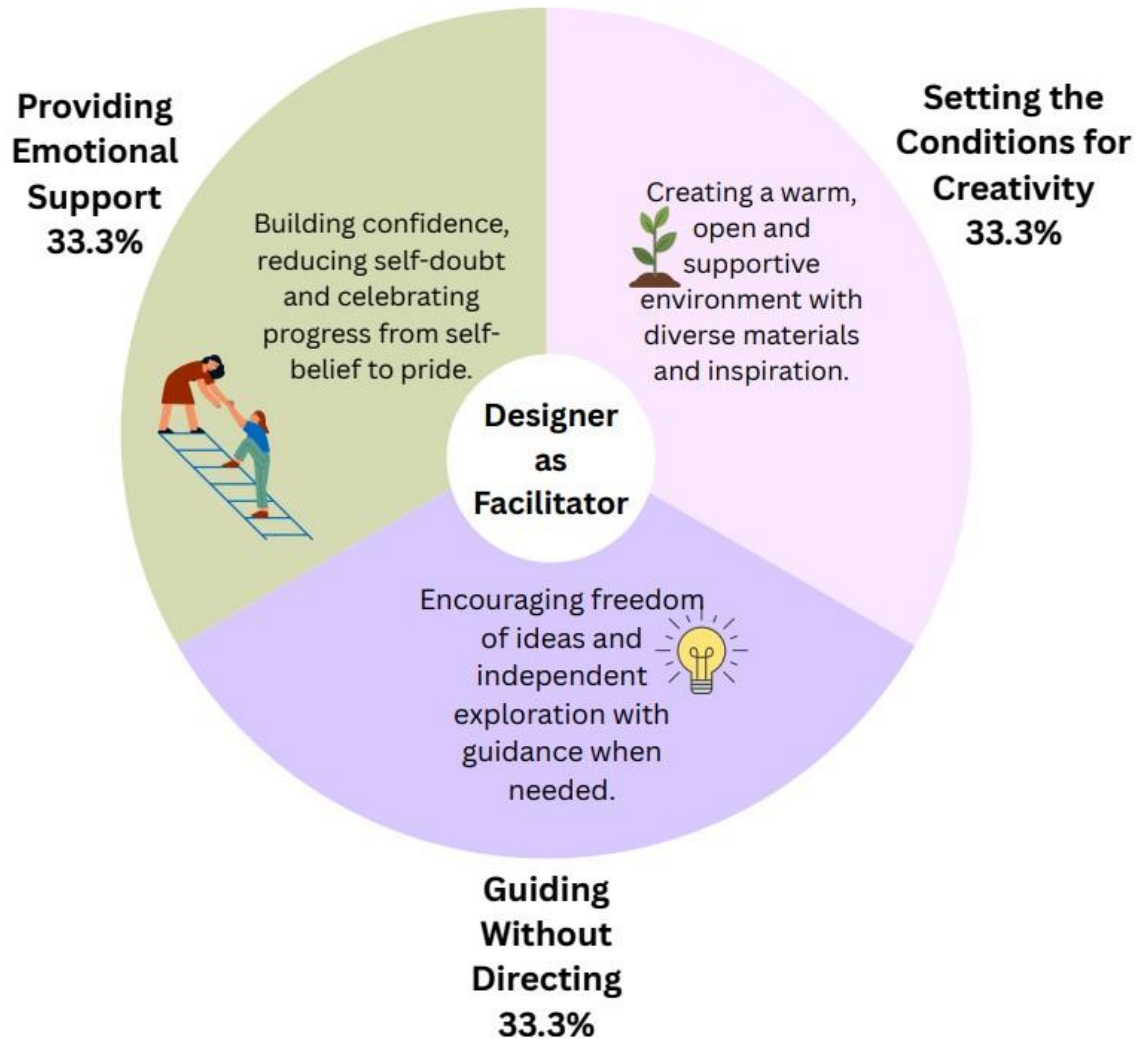


Figure 5.3: The Role of the Designer as Facilitator in Sustainable Creative Practice. (Created by Sarah Tasnim Hridi, 2026.)

Note. This model illustrates the three key functions of the designer during the workshop process.

Chapter 6: Discussion

This chapter presents findings from Chapter 5 with a discussion aimed at understanding how my research findings connect with existing literature about sustainable fashion and consumer behavior and arts-based interventions. I structured the discussion around four main themes that developed from the interview process, which included emotional connection through creative practice, waste perception changes, waste value transformation and designer functions as design facilitators that included studies on the awareness-action gap, emotional durability, design for sustainable behavior, and art as a tool for social change.

6.1. Insights and Discussion: Emotional Connection in Creative Practice and Existing Literature

As we discussed the core concept of emotionally durable design (EDD), my findings show that upcycling creates a deep emotional connection among the participants, which is strongly supported by EDD in my literature review. As Ceschin and Gaziulusoy explained, EDD is certainly a human-driven response to "psychological obsolescence," which mostly occur when people throw away the products not because they are old, broken or out of fashion but "because of changing identities, trends, and egocentrism." (Ceschin & Gaziulusoy, 2019, p. 26). The workshop that I conducted clearly demonstrated that when people sincerely make or repair their own product, whether big or small. Then they show counterproductive behavior because people are somehow attached to their creation. The participants do not easily get bored with them because they put effort, time, and creativity into that product, and it is a prized possession that they can identify with their expression and effort. During the workshop, the participants clearly experienced different forms of emotional attachment at the same time. Through the creation of different unique jewelry designs, participants expressed their individual creativity, and there is also connectivity among the participants in the room by sharing small talks, personal stories, and supportive hands in this creative space. A supportive community is built through learning new sustainable skills together. The physical and emotional process of making the accessories allowed them to create everlasting, positive memories of the workshop experience itself. These multiple sources of attachment knit them together to create a strong emotional bonds with the final products and when they wear it, they are reminded of what they achieved together."Material possessions with happiness-related symbolic meanings

can provide a contribution to subjective well-being (happiness), because they remind owners of memories, achievements, or aspirations" (Casais et al., 2016, p. 581) The research also directly support the basic idea that meaningful experience and special memory which is associated with an objects make people happy. It counts as a personal achievement. As experts state, special objects make people happy "because they remind owners of memories, achievements, or aspirations." (Casais et al., 2016, p. 581). In the future, when the participants will look at their upcycled jewelry it will remind the achievements they gain through earning a new skill and their contribution and inspiration to protect the natural environment. When I asked the participants, most of them were very affirmative that the emotional value of their creation was strongly enhanced by its connection to the environment and sustainability. They felt good and warm inside, not only because they are inspired to make something beautiful, but also because they started to do something genuinely positive for our planet, This matches the idea that "Positive Design focuses on individual well-being and on the opportunities for improvement towards positive states of feeling and being" (Casais et al., 2016, p. 581). Participant 9 expressed this beautifully by saying, "Certainly, I feel pride and a sense of satisfaction that I could contribute to creating something which is sustainable and somehow, although slightly, help mother earth."

As Son, Nam, and Diddi explain, "both positive and negative emotions have value in social media marketing in that they shape attitudes and eventually influence interactions" (Son, Nam, & Diddi, 2022, p. 10). In other words, when participants feel positive emotions about their contribution in sustainable upcycling actions, these experience encourage them to interact with their surroundings and share their newfound eco-friendly habits with others. The positive emotions will be reinforced by the cycle of sharing by the participants. Not only mouth-to-mouth communication, but social media will also play an important role to spread the positivity among social network when participants share and display they creation proudly and in a positive light. Individual behavior change is significantly important, the findings from the upcycling workshop suggest a ripple effect that the community-level can also be affected as participants share their experiences with friends and family.

6.2. Shifting Perceptions of Waste: A Discussion in Relation to Literature

As we discussed this issue and discovered that the creation of art influences how people perceive waste, with the proof that art is an excellent instrument of social transformation. As explained by Clammer (2012), the environmental challenges that humanity faces are a direct result of the culture of modern consumer society, and solving these challenges requires not only technological advancements but also a transformation in the ways we perceive our environment. In other words, our goals for the future will have to consider human emotions and artistry as well. He emphasizes that, "At the core of a truly humane conception of development are both notions of rights, needs, freedoms and entitlements, and those of hopes, futures, memories, happiness, creativity and imagination" (Clammer, 2012, p. 5). Art is an important catalyst in this process, it is more expressive and puts an imprint on our mind as art touches on the emotional, the sensual, the irrational side of things rather than just the logical side. The workshop I facilitated clearly showed that once individuals engage in the act of turning waste into art and after experience it, they begin to perceive waste differently. They no longer view waste as useless but as something full of potential and value. In my interview, Participant 5 said, "The lesson is that you have to see things with different eyes." This simple statement from her captures the essence of what arts-based research can achieve and also reminds us that awareness is not about knowing more facts, but about changing our perspective. On top of that, once our eyes see differently, our hands and hearts often follow.

The research finding shows that my study results match with existing research on the awareness-action gap, which I described in Chapter 2. There is a wide gap between what consumers are aware of and their actions because research has shown "While a sizeable percentage, nearly 80 % of respondents, acknowledged the environmental impact of fast fashion, fewer respondents, only 10 %, considered this impact when making purchases, indicating a gap between knowledge and behavior." (Koul et al., 2025, p. 521). It means most people understand the harmful effects of fast fashion, yet only a few percent take action based on that understanding, which is really disappointing. Through this workshop, practices, and the exhibition of my upcycled jewelry, I tried to close this gap by letting participants experience upcycling firsthand, and by helping people who create beautiful things from waste materials establish their understanding of sustainability through their actions. Although my workshop alone cannot fill the gap entirely for everyone who

participated in it. In spite of that, it certainly made a difference that could eventually lead to wiser decisions and, in a positive way, to continued sustainability practice progress through very small steps, some studies suggest, "increased brand transparency and consumer education could foster a shift towards more sustainable fashion choices" (Koul et al., 2025, p. 521). This explains that consumer education through better product information will lead to better sustainable fashion choices and along with practical learning through creative activities serves as an effective educational method for sustainable fashion practices. Arts-based action research provides designers, educators and researchers with an effective method to create sustainable consumption practices because it enables all to experience direct environmental transformation instead of showing them environmental damage facts.

6.3. Comparing Shifting Perceptions of Waste with Existing Research

Value transformation is an important subject to consider in sustainable fashion but people often acknowledge it only in economic terms. The literature on zero-waste approaches and innovative materials suggests that waste can be transformed into multiple forms of value addition. Some researchers explained "The development and integration of zero-waste patterns in designing sustainable apparel represent a promising approach that supports reducing pre-consumer textile waste and optimizing fabric consumption (Marin et al., 2024, p. 171). The pre-consumer waste (factory leftovers) and the post-consumer waste (used and discarded everyday items) can be turned into valuable resources. The project extends the idea of the researchers that discarded clothing and broken jewelry could be a valuable source for upcycling.

This finding directly resonates with the work of Fan et al. as researchers suggest that the reuse of old textiles and accessories is highly beneficial for society and the planet. However, we have to find all possible new and creative ways to achieve our goal. Also scholars point out "Closed-loop recycling and high value-added applications of textile waste can provide a low-cost and high-quality materials source, creating value and mitigating significant environmental pressures and economic costs" (Fan et al., 2024, p. 1930). The workshop participants unquestionably recognized the exact concept in real life. They witnessed that the old denim, broken jewelry, and fabric scraps were not worthless trash anymore. Instead, they were exceptional quality materials just waiting to be transformed.

To keep a balance between sustainability and finance is undeniably complicated and the labor-intensive nature of upcycling leaves plenty of room for further study. Quality upcycling often takes a massive amount of physical working hours, which could be difficult to produce on a massive scale. However, as Participant 9 noted, many great innovations started as a simple hobby. The main focus is not on whether uncycled materials compete and finally replace the fast fashion industry in the near future. The real question is whether it can evolve and become a significant part of the fashion ecosystem in the future.

6.4. A Comparative Discussion: The Designer as a Facilitator of Sustainable Change

The literature of design and sustainable behavior (DfSB) supports the idea that a designer can act as a facilitator as well as a creator. Lilley (2009) addressed the user's behavioral impact in chapter 2 and she positioned BfSB as a vital development beyond eco-design. She also explicitly noted, "Designers are in a position to reduce use impacts by purposefully shaping behavior towards more sustainable practices" (Lilley, 2009, p. 705). My project thoroughly extend the idea that designer must take ethical and moral responsibility not only the product they make but also influence other to change their behavior.

The core principle of Arts-based research (ABAR) is the researcher is active participant in the whole research process not merely an observer. This is connected to the literature of social sustainability and ABAR. As a workshop coordinator my role incorporated with this principle. I was not just a researcher, I acted as a teacher and a friend who was actively encouraging, supporting and was trying to tap out the full potential among the participants. The literature perfectly explain this dynamic "Artists and facilitators play multifaceted roles in AAE projects - they act as listeners, collaborators, cultural connectors and catalysts for dialogue" (Jokela et al., 2024, p. 50). Active listening, empathy and sympathy is core competence for the active researcher. One sustainability scholars pointed that out, "empathy is recognised as a fundamental competency that enables designers to create more sustainable solutions" (Corsini & Moultrie, 2021, p. 12).

In the traditional literature on sustainable design, emotional support and empathy are often ignored and not prominently discussed. Nevertheless, the findings I got from my project and workshop

suggested it is essential to provide emotional support. People often are unsure about their creative ability, to amplify the potentiality encouragement is a necessity. We all need a supportive environment where mistakes are allowed and treat as a learning process. These social psychological barriers where mistakes are considered as a failure should be subsidized and help people find happiness and worth in their sustainable actions. As researchers explain, "Positive design focuses on enabling meaningful activities and experiences which support the fulfillment of personal goals and desires" (Casais et al., 2016, p. 581). Therefore, for designers promoting upcycling is not only a technical aspect but in practice it is also an emotional journey through support, empathy and sympathy. Eventually, this emotional support helps the user to accomplish their meaningful activities.

Chapter 7: Conclusion

The purpose of this thesis is to understand how creative design and upcycled accessories can transform fashion waste into valuable items which could influence consumer awareness about sustainability and encourage people to build a stronger emotional connection with their clothes. I witnessed the environmental damage caused by the garment industry in Bangladesh and similarly moved to Finland, I realized that textile waste is a global problem and affects even the most environmentally conscious nations. This experience motivated me to conduct this research with the starting point being the awareness-action gap and this happens when consumers know about environmental issues but do not change their behavior. This research applied an ABAR method to bring together creative upcycle works, a participatory workshop, and a public exhibition to inspire people to act more sustainably.

The key outcome of this research highlighted three main points. The first one is that upcycling builds a strong bond between the creator and the object. Every individual who invests time, effort and creativity to create a handmade product is able to gain a sense of pride. Physical tasks like sorting the old scraps and material, cutting the fabric and sewing can change the mindset with a clearer grasp on the "zero-waste" concept. Secondly, designers can raise awareness by providing a creative hand on experiences and engaging participants to understand sustainability. It is common for people to be afraid of failure when doing creative crafts, but this issue can be solved by designers by playing the role of an educator and facilitator to create a supportive atmosphere for exploring new skills. Thirdly, fashion waste can transform into multiple values, such as emotional, environmental, economic, aesthetic value and these mixed values work together to make upcycled pieces truly meaningful because these items not only look beautiful but also carry a personal story and help protect nature. What's more, creating upcycled accessories allows people to save money and, at the same time, leave a positive impact on the environment.

The findings from this thesis are grouped into four themes based on the data analysis and these are emotional connection, shifting perception of waste, value transformation and the designer's role as a facilitator. All these findings prove that creative practice can influence people's understanding in sustainability and make people rethink their shopping and material selection for use. Upcycle hands-on activities contribute to helping participants build a strong bond with materials and

developed a personal sense of responsibility toward waste. One participant shared an opinion after the workshop experience, "to see things with different eyes." This change in view of waste is most important because it addresses the core problem of this research and helps close the gap between knowing and actual behavior. This study shows that learning by doing is the best way to encourage sustainable habits.

This thesis makes a practical contribution and demonstrates that ABAR can create real social change in the sustainable fashion field. Rather than focus on a large-scale industrial solution, this research proves that the power of local, community-based action combined with creative practice is a highly effective educational tool. This study adds valuable insights to Design for Sustainable Behavior (DFSB) and suggests that future design should focus on providing consumers with emotional rewards and confidence.

Limitations are important to acknowledge to present a true and balanced picture of the work and in this research, the first limitation is that the workshop involved only nine participants from Rovaniemi. With this small group size, detailed interviews but the results cannot be generalized to a universal population. On a positive note, participants came from diverse cultural backgrounds, including Finland locals, Australia, Brazil, Sri Lanka, Peru, Canada and this diversity is a major strength of this research. Still, a larger sample is required to draw wider conclusions.

The second limitation is that the study captured immediate change in mindset but long-term behavioral change was not tracked, thus it remains unknown if they maintain their sustainable habits weeks or months after the project. Third, the process of upcycling takes a lot of time and efforts to create small accessories is manageable but applying for all regular clothing takes too long to become a true alternative to fast fashion.

Finally, another limitation highlighted by participant was lack of basic sewing supplies such as needles, thread, collection of scrap fabrics at home and to get all these initial cost it high, while the workshop provided all the necessary equipment, it was easy for them to work upcycling in a community workshop but not having tools and materials at home is a big barrier to upcycling independently, which means without easy access to the right physical tools, long-term behavioral change is severely limited.

Recommendations for future research present clear next steps based on the study's findings, opportunities and limitations. To scale up the research, future researchers could conduct the creative workshop with diverse demographic populations and communities. As an example, future research could inspect the effect of integrating hands-on upcycling programs into the curriculum of elementary and secondary schools and how this sustainable practice shapes the habits of those school-going students from a young age. Future researchers could explore the viability of create localize "upcycling library" where local community members can donate tools, fabrics and unwanted materials that other people can use them free of charge. This cooperative model could lower the hurdle for the less privileged community members who have difficulties affording tools and materials, as well as do not have storage space. It is also a sustainable solution to prevent those usable materials from ending up into landfills. As a result, the upcycling will be accessible to everyone regardless of their economic background. A community-based sustainable fashion initiative could be established as a pilot project to collect the data. Another significant area for future research is how cultural exchange can be fostered through an upcycling workshop. During this workshop, participant from diverse and multicultural backgrounds come together and bring their own cultural motifs and traditional crafts to the creative process. Future researchers could investigate how community workshops work as a platform for sharing cultural heritage through upcycling.

As I completed writing the thesis, many ideas came to mind. However, the most significant one is about the waste we transformed into something totally new but also, this community-based workshop brings people together. This could result in cultural exchange and social harmony. The environmental hazard caused by the fashion industry cannot be solved by buying "greener products". The requirement is a fundamental shift in our mindset on how we value the environment and what can be done to protect it. This thesis has shown that when we invited people to participate in the workshop's creative process, it ignited something new "a change in awareness." The cultural and lingual diversity of the participants in my workshop showed that upcycling is not only about the transformation of the waste but also about bringing people together across language and culture. In the end, when people stop seeing themselves as just a shopper and start realizing the potential as a creator, ethical consumption begins there.

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