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The Connective Thread: Exploring Chinese Gen Z early fashion adopters' Value and Motivations Towards Upcycled Fashion with Means-End Theory

Abstract

The circular economy becomes increasingly commonplace and is seen as a counterforce to the dominating fast fashion paradigm. Upcycling, understood here as a design strategy to create new items out of old ones, is one circular strategy that seeks to reduce textile waste. Although a relative niche concept, it increasingly gains popularity, with (luxury) fashion brands promoting upcycled fashion lines. This qualitative inquiry draws on 18 in-depth semi-structured interviews to explore Chinese Gen Z early fashion adopters' values and motivations towards upcycled fashion.

This study adopts means-end theory thereby linking product attributes to consequences and perceived values. This study contributes to knowledge by demonstrating how different values can be activated under different situation, which has not been fully explored under means-end theory. Here, different situation link to various levels and dimensions (e.g., new and past) of consumer knowledge. The findings outline that participants' different perceived values were activated under different decision situation, linking to various knowledge levels and product attributes. This study contributes to the understanding of upcycled fashion products consumption and gives insights into purchasing criteria and behavioural choices from Chinese GenZ consumer's perspective. Moreover, terminology on upcycled fashion raw materials can influence value perceptions, which provides practical recommendations through developing clear messaging strategies.

Introduction

Although the fashion industry contributes approximately $2.5 trillion in global revenues annually (McKinsey 2020), it also generates 92 million tons of textile waste during the same timespan (Kim et al. 2021). Statistics are very similar for the Chinese economy, where rapid economic growth and overconsumption within the largest population worldwide, has caused environmental degradation and increased public interest in sustainability (Jung et al. 2020).

Textile waste is expected to continue to surge due to the rise of the digital economy and (super)fast fashion, driven by social-media activities and influencers (Chen 2022). An example that can be provided here is the 'haul' phenomenon, whereby influencers share videos on social media platforms such as Instagram, Snapchat, or TikTok highlighting the newest purchases they made (e.g., Hann, 2011; Maguire, 2022; Makkar & Spry, 2024). This phenomenon is especially popular among the 'younger' generation – GenZ (Maguire, 2022). Hauls and social media activities in general lead to an increased demand for new styles and cheap items, accelerating environmental and social disasters. In response to these disasters, the circular economy has emerged as an alternative approach (Henninger et al. 2021b), seeks to improve conventional production and consumption practices to counteract the fashion industry's

negative impacts (Niinimäki 2017; Henninger et al. 2021a, b). Two main strategies that address fashion's waste and pollution issues, while linking to the circular economy, include recycling and upcycling. Contrary to recycling which involves converting textile waste into reusable raw materials (not always with the same value), upcycling is defined as a process to reuse existing materials (e.g., deadstock, pre-loved materials), or components of (discarded) goods to create new products with higher quality or value through design and craftsmanship (Bridgens et al. 2018). Extending a garment's life by 9 months has the potential to reduce its carbon, waste, and water footprint by approximately 20-30% each and thus, could counteract negative environmental implications (EAC 2019). Fashion upcycling, which focuses on economic value creation and preservation of resources already in use, could facilitate this extension through re-looping already existing resources (Hot or Cool 2022).

Upcycling techniques have been promoted and practiced by an increasing number of fashion brands (Patagonia, Freitag, Les Fleurs Studio) and thus, have made upcycling more mainstream and accepted (Freitag 2021; Henninger et al. 2022). Similarly, in China, upcycling is increasingly accepted especially by early fashion adopters, even though parts of the garment may be classified as second-hand and thus, were stigmatised in the past (Reuters 2020). Social media has played a key role in educating Chinese consumers about sustainable fashion. China's GenZ is described as more environmentally aware and are found to increasingly value sustainable attributes in fashion products (Rahman et al. 2020; Jiang, 2021). Although an increasing number of Chinese fashion brands are adapting sustainable practices by using recycled materials or non-toxic dyes, Chinese upcycled fashion brands (Another Aura, Re-Clothing Bank, Labelhood Youtopia) remain a niche market and operate at a relatively small scale (Sung et al. 2020). This could be partially explained, as it is predominantly early fashion adopters, who engage in the consumption of upcycled fashion (Jiang 2021). Since the fashion upcycling market in China is in its infancy, related studies and market reports regarding Chinese GenZ's upcycled fashion consumption are insufficient (Phau et al. 2022). However, with a growing number of Chinese GenZ consumers becoming increasingly concerned with sustainability, upcycling has a potential to grow in the future (Statista 2022).

This research utilises means-end theory to explore Chinese GenZ early fashion adopters' values and motivations towards upcycled fashion products. In this study, 'early fashion adopters' (from here referred to as Chinese GenZ consumers) are considered as someone who quickly embraces new fashion trends or styles before they become widely popular. This study differs from previous research using means-end theory in that it does not focus on the broad concept of 'sustainable fashion consumption' (Lundblad and Davies 2016; Lee 2023), but rather on upcycling practices. Sustainable fashion and its consumption can encompass various product categories that possess distinct product attributes (e.g., upcycled and recycled products), thus, consumers can hold diverse values and motivations based on different product attributes (Walker and Olson 1991; Lundblad and Davies 2016). Upcycled and recycled fashion products can vary in their product appearance and production methods. Upcycled fashion items often feature patchworks and visible mending, which can make them more fashionable and appealing to certain consumers. Moreover, consumers' motivation and value perception towards a product can also vary depending on different decision situations (Walker and Olson 1991). Here, various situations could encompass different product attributes, usage situations, and

different levels of consumer knowledge pertaining to that particular decision-making scenario (Harris et al. 2016; Yan et al. 2020). Currently, there is a lack of research on different product attributes and decision situations in relation to sustainable fashion consumption and means-end theory. This research addresses this gap by exploring values and motivations underpinning Chinese GenZ consumers perceptions towards upcycled fashion products. It will delve into different decision situations, which are connected to varying levels and dimensions of consumer knowledge, while also exploring the role of product attributes. Chinese GenZ consumers were chosen as they are characterised as willing to spend money and sustainability-orientated, and thus, a potential target audience for upcycled fashion (Rahman et al. 2020). Knowing how product attributes and different decision situations activate diverse values is critical as they can help to form communication strategies to raise consumers' awareness, increase understanding of upcycled fashion, and support the Environmental Audit Committee's (EAC) (2019) mission of reducing the impact the fashion industry has on the natural environment. Thus, this research aims to 1) identify existing means-end relationships within the context of upcycled fashion consumption 2) explore how different decision situations influence these means-end relationships.

Literature Review

Means-end theory

Consumer values are predictors of consumer behaviour since these are present throughout the formation of consumer attitudes, information processing, and purchase (Gallarza et al. 2011). The early definition of consumer value highlights the notion that value is a customer's subjective assessment and preference for certain attributes, performances, and outcomes of a product, which either helps or hinders the achievement of their goals/purpose in specific usage situations (Reynolds and Gutman, 1988).

Consumer values are well explained by means-end theory, which proposes that consumers use means (products) to achieve end goals (values) through evaluating the benefits or risks (consequences) underpinning consumption (Gutman 1982). Thus, prior to making a purchase, consumers will use their preferences for products (attributes) based on the functional and psychological benefits or risks they might acquire (consequences), with an aim of achieving their values (Reynolds and Gutman 1988). Figure 1 visualises the hierarchical order of the three interconnected dimensions linked to means-end theory that support consumers' decision-making: product attributes, consequences (benefits or risks), and values (Reynolds and Gutman 1988). Attributes include concrete and abstract features of a product, for instance, good quality and environment friendly. Consequences represent psychological and functional motivations or risks consumers receive from these attributes (Olson and Reynolds 2001). Lastly, consumer values link to consumer desired goals, which help determine their purchase decisions (Reynolds and Gutman 1988).

Figure 1: The means–end chain (Olson and Reynolds 2001: 13)
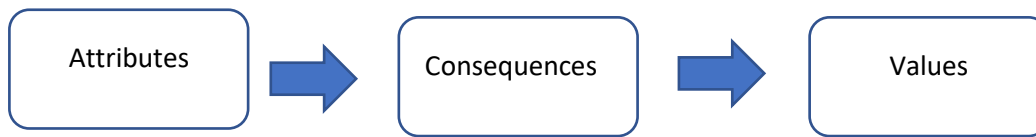
Means-end theory also suggests that consumer decision-making is a form of problem-solving, which goes beyond mere cognitive rationalisation. This implies that consumers actively seek to increase gains and reduce negative outcomes when fulfilling their needs (Olson and Reynolds 2001). To explain, different decision situation (different product attributes, usage situations, consumer knowledge) are likely to activate different problems (consequences) and values, and the values that influence behaviour may be completely different in different situations (Olson and Reynolds 2001; Yan et al. 2020). Means-end theory has been used to explain the values underlying sustainable and ethical fashion consumption (Lundblad and Davies 2016; Lee 2023), thereby using generic product categories (sustainable or ethical fashion products) that possess environmentally and socially responsible attributes (e.g., fair-trade, recycled, organic cotton) and thus, do not fully capture the diverse range of products falling under the umbrella of sustainable fashion (e.g., upcycled fashion products). Only Hur's (2020) and Lee's (2023) studies focused on one specific product category (sustainable fashion bags). Yet, even within a product category there are differences, for example, a luxury bag made of mushroom leather and a tote bag made of organic cotton can be perceived differently due to potential variations in decision situations, such as the intended usage. This highlights that specific product attributes and decision situations play important roles in influencing consumer perceived values. Despite the considerable contributions in the research field of sustainable fashion consumption, and consumer value perceptions, studies that focus on upcycled fashion products are limited, especially in the Chinese context (Yoo et al. 2021; Phau et al. 2022). This, however, can be surprising as media increasingly report that GenZ Chinese consumers (Booker, 2021; Wu, 2021), especially those based in first-tier cities are "beginning to respond to upcycled fashion" (Jiang, 2021).

It remains unclear what motivates and/or hinders Chinese GenZ consumers to choose upcycled fashion products (Yoo et al. 2021). This study addresses these gaps, by focusing on upcycled fashion products and exploring consumer values and attributes under different decision situations through the theoretical lens of the means-end approach. The decision situations that this research explores link to diverse product attributes and varying levels and dimensions of consumer knowledge. The importance of the latter aspect will be discussed in the next section.

Knowledge and means-end theory

Consumer knowledge is commonly incorporated with consumer values to investigate their effects on consumer behaviour intentions towards sustainable fashion products (Yan et al. 2020). The means-end chain is regarded as an appropriate model for depicting the connection between products and self-values. When considering the means-end chain in the knowledge

context, means (attributes) symbolise consumer knowledge, while ends (values) represent consumer's self-knowledge (Figure 2) (Olson and Reynolds 2001). Consequences of the means-end chain model can fall within both consumer knowledge and self-knowledge, where functional consequences (e.g., comfort, durability) link to consumer knowledge, and psychological consequences (e.g., support environment) link to self-knowledge.

Figure 2: Knowledge and the means–end chain model (adapted from Olson and Reynolds, 2001: 13)
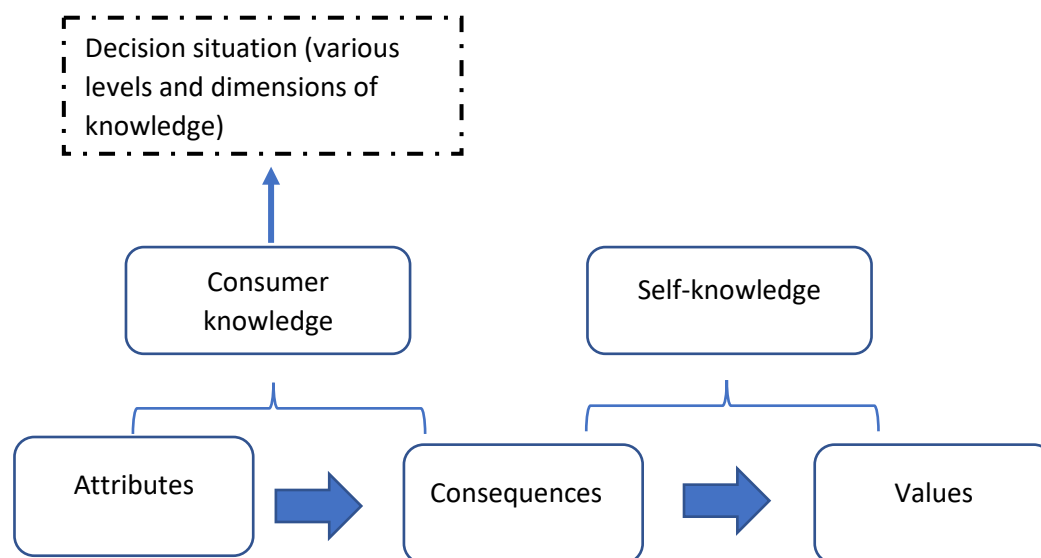
Thus, the value that influences behaviour can vary in different decision situations. Here, diverse levels and dimensions of consumer knowledge represent the different decision situations and can further activate different self-knowledge (i.e., values) (Walker and Olson 1991; Yan et al. 2020).

Consumer knowledge consists of familiarity and product knowledge. Familiarity refers to accumulated consumption experiences. For example, consumers may purchase basic t-shirts on a regular basis and thus, understand sizing, quality, and price better than if they would buy a one-off ballgown. Product knowledge refers to the sum of product class information and rules stored in an individual's memory (Philippe and Ngobo 1999). Consumer knowledge is an important factor that can lead individuals towards sustainable consumption since knowledge reflects an individual's cognitive aspect. Thus, it can contribute to enduring changes in consumers' attitudes and behaviours (Kang et al. 2013). Rao and Monroe (1988) and Yu and Lee (2019) explained that prior consumer knowledge can have effects on value perceptions of products. Within Yu and Lee's (2019) study consumers with prior upcycled fashion product knowledge can better assess the aesthetic aspects of upcycle products, which, in turn, allows them to form a more positive attitude toward these products. Linking this to means-end theory, it can be explained that motivation and consequences for the self are derived from product

attributes and can be further developed through past product experience and/or prior consumer knowledge (Walker and Olson 1991)

Consumers' values towards sustainable fashion products

Within the domain of sustainable fashion consumption, a wider range of values has been identified by using the means-end approach, including financial, ethical, and egoistic values (Kim et al. 2021; Lee 2023).

Financial value or value for money is associated with a product/service fulfilling its functional, utilitarian, or physical purpose (Sheth et al. 1991) in that it focuses on how consumers weigh the perceived quality and/or expected performance of the offering against its cost. Although products perceived as "value for money" are important for consumers, past studies also argued that sustainable fashion consumers perceive product value in non-economic terms (Lundblad and Davies 2016). In their study, consumers perceive psychological benefits (e.g., feeling good, supporting the environment, improving self-esteem) more important than premium prices. Upcycled fashion products are made from existing materials (deadstock, pre-loved material), thus, it could be assumed that consumers have a high acceptance of these products, as the material has proofed to be durable and long-lasting. However, Sung et al. (2020) found the opposite in that consumers often had negative perceptions towards upcycled fashion products, as they are made from second-hand or waste materials or deadstock.

Ethical values were previously highlighted, describing consumers overall assessment of the benefits and losses of acquiring a product/service according to their environmental desires, sustainable and ethical expectations, and needs (Chen and Chang 2013). Lundblad and Davies (2016) discovered that consumer hypothetical sustainable fashion consumption behaviours closely link to ethical values, such as social justice, equality, and environmental support.

Egoistic values include self-expression and self-esteem, which have been closely linked to sustainable fashion consumption (Kim and Damhorst 1998; Hur 2020; Kim et al. 2021; Lee 2023). Self-esteem can derive from a feeling of belonging to one or more social groupings (Sheth et al. 1991; Lundblad and Davies 2016). Thus, individuals may purchase products if they believe this gives them an 'in' into a specific group. Within the fashion context, self-expression is about being able to showcase an individual's personality, values, and opinions through their clothing. Regarding upcycled products, apart from being a practical solution to mitigate environmental harm, upcycling can also help to meet hedonic needs of consumers through an enhancement of aesthetic appeal and self-expression (Sung et al. 2015).

Methodology

Soft laddering interview technique is commonly used to study means-end theory (Olson and Reynolds 2001; Lundblad and Davies 2016). This one-on-one interview technique was used to explore how Chinese GenZ consumers interpret product attributes, their consequences, and underlying values towards upcycled fashion products. The findings are supported by eighteen

semi-structured interviews with participants who are working or studying in fashion design or fashion business related sectors, and thus more likely to catch on trends early.

Although this sample size is relatively small, it provides insights into how a relatively niche concept (upcycling) and its products are perceived and follows in line with previous qualitative research (Lai et al. 2017; Luo et al. 2023). Upcycling remains a recent phenomenon within China, thus, it was key to ensure participants are familiar with the term/meaning, to explore what may be opportunities and challenges faced by upcycling brands (Phau et al. 2022). The average consumer may, currently, neither be aware of what upcycling is nor consume this type of fashion (which is also reflected in the findings section, with only 6 of the participants actually being able to define upcycling). Thus, we purposefully recruited Chinese GenZ consumers with backgrounds in fashion design and/or fashion business. This deliberate recruitment allowed us to generate more in-depth discussion.

We purposively recruited participants that identified as either male or female and included both students and working professionals (Table 1) (Easterby-Smith et al. 2015). The interviews lasted approximately 60 minutes. Although the sample size could be seen as a limitation, data saturation was reached, with no new themes emerging.

Table 1: Participant overview

Participant	Gender	Age	Background (Fashion)
1	Female	23	Design
2	Female	23	Design
3	Male	24	Design
4	Female	26	Graphic design
5	Female	27	Production coordination
6	Male	23	Design
7	Male	22	Design
8	Female	23	Design
9	Female	22	Design
10	Female	25	Buying
11	Female	26	Buying
12	Male	25	Display design
13	Female	24	Buying
14	Male	23	Fashion student
15	Female	26	Production coordination
16	Male	22	Design
17	Male	26	Buying
18	Female	23	Fashion student

To stimulate discussions, the questions posed were open-ended (Patton 1990). Table 2 provides an overview of the themes and key questions asked. To study the impact of different decision situations (i.e., varying levels of consumer knowledge) on consumer values, the interviews

began by assessing participants' current knowledge and their perceived values regarding upcycled fashion. This involved asking participants to describe their understanding of upcycled fashion products. The researchers then explained the definition of upcycled fashion, without delving into extensive details about the design and production processes. Participants' perceptions were subsequently assessed. Finally, participants were provided with additional consumer knowledge (i.e., upcycling as a design concept) accompanied by visuals (upcycled fashion items from E.L.V. Denim (2021), Bode (2020) and 1/Off (2019))[1]. This was done to familiarise participants with the concept of fashion upcycling as understood within this research. Participants were then asked to share their potentially renewed perceptions towards upcycled fashion products, allowing to assess their motivations and values. In this research upcycling is understood as creating a new fashion product from materials that have already been in use and/or classify as deadstock. Created upcycled fashion products are of equal or higher value than the original piece.

Table 2: Interview themes and questions

Themes	Key Questions
Knowledge	• How would you describe upcycling? • What is fashion upcycling and/or upcycled fashion product? • What brands do you know provide upcycled fashion products? • What, if anything, makes upcycled products different from other garments?
Attributes	• What do you think about these (upcycled) products?
Consequences	• What is it about upcycled fashion products that you like/dislike? • What may hinder you to buy upcycled products?
Values	• How do you feel about upcycled fashion products now? • Why would you buy upcycled products?

All interviews were conducted online, recorded, and transcribed verbatim. To ensure participants were able to fully express themselves, the interviews were conducted in Mandarin Chinese. Initially the interviews were transcribed in Mandarin Chinese before they were translated into English and back translated into Mandarin. This process ensures the accuracy of quotes used, as well as that no meaning was lost. The translation process was conducted by the lead author, with one of the co-authors further checking the accuracy.

Data was analysed following Braun and Clarke's (2006) six-step thematic analysis guide, as it allows for patterns and themes to emerge organically. Initially, the authors familiarised themselves with the data set, reflected on the initial findings, linked codes, created categories and themes, and re-coded data if necessary. The data set was coded multiple times, with each researcher independently coding parts of the data set before discussing the emerging themes.

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[1] For copyright reasons pictures cannot be included.

The themes were discussed and recoded, with any discrepancies being further investigated. Based on these discussions a coding framework was developed, which allowed the lead author to complete most of the coding. This coding process not only fostered intercoder reliability, but also consistency in presenting the themes (O'Connor and Joffe 2020). Thematic analysis generated 4 key product attributes, 8 consequences and 4 key values, as shown in Table 3. Moreover, terminology is another theme that was generated from the findings and will be discussed in detail in following section.

Findings and Discussion

Upcycled Fashion Terminology

Participants with fashion design and/or fashion business backgrounds were purposefully chosen, to ensure in-depth discussions could be facilitated. It is noteworthy to highlight that only six participants were able to define what 'upcycling' means. Interestingly, recycling and upcycling were often used interchangeably, as it was seen to be the same concept: "I've had some knowledge about sustainable fashion because sometimes I come across it during my work. But upcycling, I cannot tell too much about this. I thought it's the same as recycling" (#P4). Whilst another participant outlines that "I have seen clothes like these before, they're made by putting different pieces together. But I am not aware that it is called upcycling, and I'm not sure about what it is about" (#P6). Similar statements were also made by other participants, with #P13 highlighting "I once saw a sofa with a cover made by combining different pieces of old denim, which impressed me a lot. At that time, I didn't notice that this design concept had a name of its own, but now I assume it's exactly upcycling".

Various implications emerge from these quotes: firstly, it becomes apparent that even though participants worked in the fashion industry and/or studied fashion-related courses, they are unfamiliar with upcycling as a design concept. This could confirm previous studies in that upcycling is classified as niche in China, with relatively low recognition among consumers (Sung 2015; Sung et al. 2019). Yet, it also highlights that upcycling is neither part of the fashion curriculum, nor mainstream in the Chinese fashion industry. An explanation could be stigmatisation of secondhand garments and more broadly speaking, the secondhand market in China. Purchasing secondhand was previously seen as a taboo, as there was a "cultural superstition that used clothing is unlucky" (Lin 2015), which has only more recently changed. Other challenges that emerged are the fact that recycling and reusing clothes could be seen as unprofitable as upcycling only allows for limited collections, since raw materials are finite. Moreover, within China non-charitable sales of used garments are banned for health and safety reasons, which has been reinforced during Covid-19 (Bloomberg 2020).

Secondly, participants were familiar with recycling, with several participants mentioning high street brands such as H&M, which have introduced take-back schemes and actively promote recycling practices. This concurs with findings from Henninger et al. (2016), who outlined that knowledge and awareness of practices and/or products can be increased through large, multinational organisations, whilst smaller ones may find it challenging to make a large-scale impact. Within China upcycling is a relatively new phenomenon, with most brands that engage

with upcycling practices being classified as small (less than 50 employees), dispersed, and/or low-key entrepreneurs (Sung et al. 2020).

Thirdly, parallels can be drawn in terms of sustainability and upcycling. Sustainability generally is an intuitively understood concept and can mean different things to different people (Niinimäki 2017). Similarly, upcycling was defined differently by interviewees. Although participants were recruited on the basis that they had upcycling knowledge and/or were familiar with the concept, different definitions were provided. Some participants also indicated that they knew what upcycling is but were unable to put it into words to fully encapsulate everything it means to them. This has implications in that more will need to be done by different stakeholders (e.g., designers, educators, and governments) to educate especially consumers on what upcycled fashion is, for them to make a conscious decision to buy into the concept. Generating buy-in could help to follow through on the EAC's (2019) goal to reduce carbon and water emissions, as garments would be in circulation for longer.

The means-end theory & upcycled fashion consumption

From the interviews, key attributes, consequences, and values are identified (Table 3), the terminology for these identified elements is given based on previous studies in the same field (Lundblad and Davies 2016) to allow the consistency for knowledge building. In line with the presentation format of previous qualitative studies (Lundblad and Davies 2016; Lee 2023), a specific hierarchical value map (HVM) was generated to showcase the paired links between attributes and consequences and values (Figure 3).

Table 3: Means-end elements obtained for upcycled fashion products: attributes, consequences, and values

Attributes	Consequences	Values
Waste materials	Durability	Self-esteem
Materials with luxury elements/parts	Value for money	Self-expression
Quality	Authenticity	Ethical value
Unique style	Feeling good and proud	Sense of accomplishment
	Individuality	Financial value
	Feeling embarrassed	
	Support environment	
	Confidence	

Overall, attributes of upcycled fashion products identified from our interviews linked to three aspects: *materials*, *product quality*, and *product style*. Different attributes further triggered different consequences of the means-end chain (MEC). Within this study, consequences cover consumer perceived functional and psychological benefits and risks from acquiring upcycled fashion products, including *value for money, good feeling, feeling embarrassed, support environment,* and *authenticity.* As the last stage of MEC, consumers' purchase decision/behaviour intention towards upcycled fashion products is driven by values such as *financial value, self-esteem, self-expression, sense of accomplishment,* and *ethical value.*

Whilst identifying MEC elements and their interrelationships is one of the research objectives, we also observed that activated values varied across different decision situations, influenced by product attributes and the levels and dimensions of consumer knowledge being presented. To effectively discuss the findings, the HVM (Figure 3) has been structured to outline three situations (patterns). These are discussed in the following, exploring the values, consequences, attributes, and consumer knowledge that underpin them. The significance of the relationships between paired links (i.e., between attributes and consequences and values) was visually represented by the thickness of the lines in Figure 3. The lines grew thicker in proportion to the frequency of mentions by participants, highlighting their importance.

Figure 3: The means-end hierarchical value map (HVM) for the consumption of upcycled fashion products across *different decision situations.*
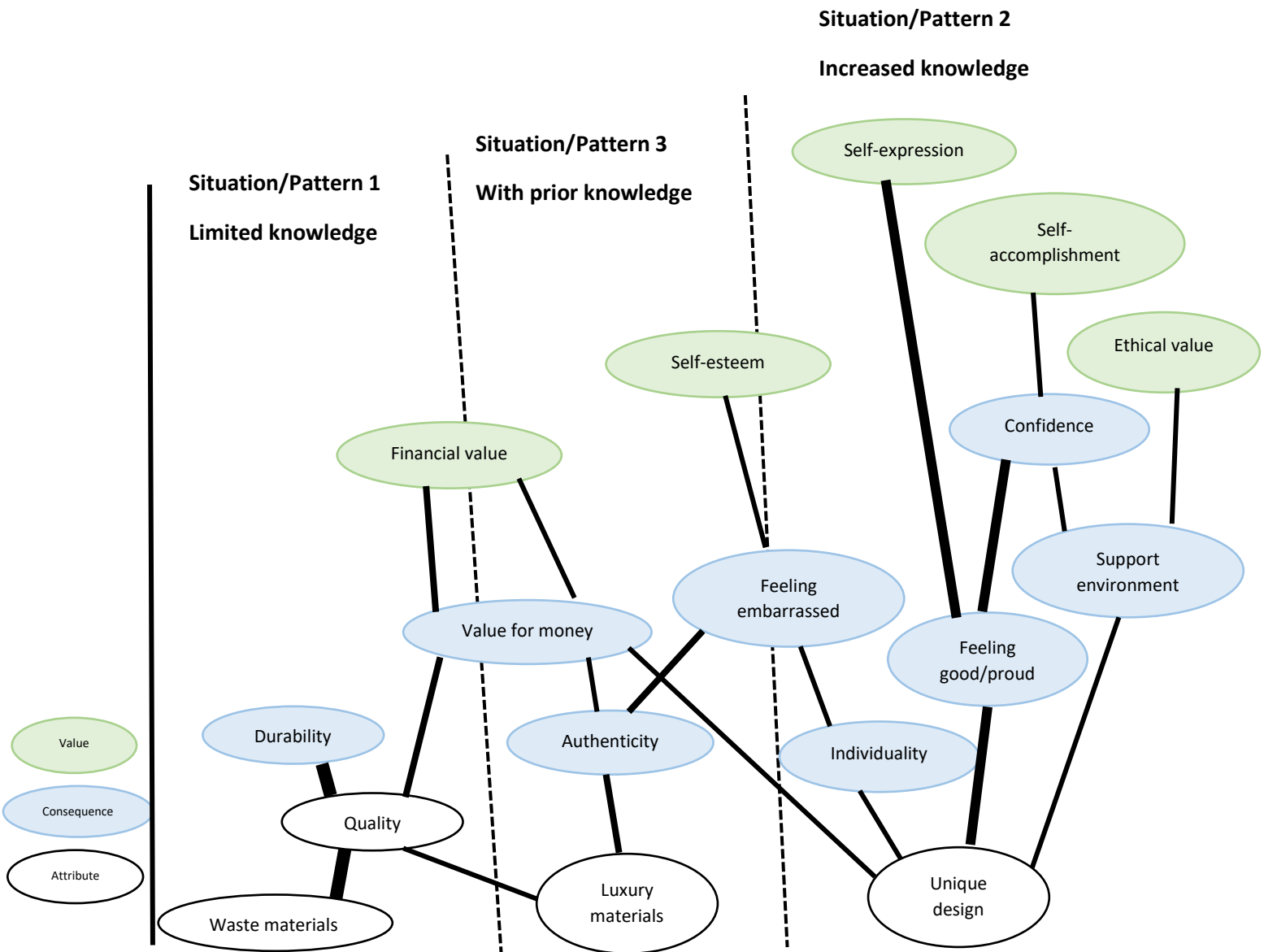
Situation 1: Limited consumer knowledge

Once a working definition of upcycled fashion was provided during the interview process, to help participants understand how upcycled garments were created, discussions were stirred towards perceptions of upcycled fashion.

Interestingly the initial reaction towards upcycled fashion was negative. Participants were generally concerned about the quality of an upcycled fashion item, "since the products are made of waste materials, it's hard not to think about quality issues" (#4). Similar concerns were raised by other interviewees, with raw materials being described as "worrying" (#P8, P#9). These observations indicate that participants associated a performance risk with upcycled products, as they believed upcycled products cannot meet their functional expectations (good quality, durability). This however was only seen to be true for items made from pre-loved garments. Although GenZ generations are engaging with secondhand garments, the stereotype of these being unlucky seems to still be underpinning some decisions. Garments made from deadstock fabric are perceived more favourably, as the raw material remains.

Some participants believed that the price of an upcycled fashion item should be lower. #P15 stated "the materials are discarded once, so they should be much cheaper, even though the collection or design costs might be raised, costs for material procurement will be lower". Two noteworthy aspects need to be highlighted: on the one hand, participants were keen to gain value for money. On the other hand, they described materials as "discarded" (#15) or "waste" (#4), which has a negative connotation. This concurs with findings from Sung et al. (2020) who also observed such negative connotations towards raw materials of upcycled products. Using terminology such as waste automatically implies inferiority, in that there was a reason to discard the original item. To explain, reasons for 'discarding' an item were predominantly negative in that an item was damaged or the material was weak, rather than due to no longer being fit for purpose (too tight, too loose) or no longer the right style. Looking at the terminology there could also be a financial risk: purchasing 'waste' could be seen as a poor investment and thus a loss in monetary assets.

Thus far, it becomes apparent that there are perceived risks associated with the raw materials used – if they are pre-loved -, and participants were less motivated to purchase upcycled fashion products. This could also be explained through the lens of self-esteem. Although this has not been shown from our findings, it is indicated that in some cultures (e.g., Chinese culture) wearing 'waste' may be seen as socially undesirable. Our findings challenge previous studies that commonly associated sustainable fashion with high quality. Although upcycled fashion products fall within the sustainable fashion products category, it does have distinct production methods and product attributes. Consequently, they can evoke varied perceived consequences among consumers, as demonstrated in our study.

Situation 2: Increased consumer knowledge

During the interview, participants were further provided with additional knowledge linking to the design and production process of upcycled fashion products, accompanied by visual

representations showcasing various collections. During the interviews, the word most often used to describe the garments showcased was "unique". Participants outlined that "they have vivid designs […], different materials are combined to create a vintage feel" (#P2). "They are pretty, and I like them because they have a distinctly vintage feel, which seems to be a good match with my personal style" (#P13). What emerges from the discussions and the quotes is that the feeling towards upcycled fashion changed once participants had an opportunity to learn about design and production processes and look at finished upcycled fashion items that are aesthetically appealing. Rather than seeing first and foremost the 'waste' element of designing new items with discarded raw materials, the aesthetic aspect of the item moved to the foreground. Positive connotation towards upcycled products concurs with past research (e.g., Yu and Lee 2019).

Throughout the interviews, we noticed that participants started reflecting on what upcycling is and how it fits with their self-values. Here we observed sustainability emerging as a key theme. #P3 stated that "the sustainable fashion products I purchased before are typically simple, like plain T-shirts made by recycled polyester […], I'm surprised to see those upcycled products are very trendy and carry their own style". #P10 further added that "I think upcycled fashion products meet the needs that wearing chic clothes and embracing sustainability at the same time, its unique charm as it makes the green attributes of the product more observable". These statements are particularly interesting as they reiterate a point that we made earlier, in that upcycling and sustainability have commonalities, with being intuitively understood, yet differently interpreted. Historically, sustainable fashion was associated with the 'hippie' movement and thus, seems to be part of a political statement, which negatively tainted the concept. Seeing as upcycled products are made from 'waste', similar unfavourable associations were made by our participants, prior to actually seeing collections. Once participants understood that upcycled fashion does not look like 'waste', they felt strongly about engaging with upcycled fashion, and highlighted they would feel proud to show off fashionable items that are also more environmentally friendly (Sung and Cooper 2015). "If I'm wearing an upcycled fashion product, which looks very unique, my friends will definitely come and ask me where I get it. And yes, I'll be proud to say this is a green product and feel happy to tell the story behind the product" (#P1). #P11 further elaborated that being able to express environmental consciousness through the garment was important to them, as it was linked to their self-esteem as an environmental conscious individual. Aside from self-expression and ethical values that upcycled fashion products can bring, self-esteem plays a vital part: "It looks cool and wearing one will definitely give a feeling of uniqueness and chic, and it also provides me with a sense of confidence" (#P18). Overall, participants were passionate about expressing their self-identity and were proud and feeling confident of doing the right thing and they also want to share that knowledge with others through these upcycled collections.

Yet, positive feelings of being able to express themselves through upcycled garments could also be tainted, with participants highlighting that being unique is great, but "to be honest, I do not think I'll wear it too often even if I've purchased one. It leaves others a very strong image, and I hate to let others feel that I keep wearing the same clothes" (#P15). This implies that our participants were conscious to not "lose face" and damage their self-esteem. Contrary to Yu and Lee's (2019) findings, highlighting that upcycled products can have high social value, as

they are unique. Our findings show contradictory results, indicating that garments that are too unique and well recognised may portray an unfavourable image. This has further negative implication on the environment, as #P18 outlines, "if you cannot wear it [an upcycled fashion product] too often, then it will lose its intended value as a green fashion alternative, as people may only want to wear it once or twice and then abandon it again". Thus, there is a need to design upcycled fashion that is portraying a unique look without making the individual stand out too much, in order to foster longer use.

Situation 3: Prior consumer knowledge comes into play

A growing trend among luxury brands is upcycling their own garments (Miu Miu, Prada), sometime through collaborations. As part of our study, participants were shown a visual featuring a collaboration between a fast fashion brand and a luxury brand, in which the signature material from the luxury brand is reused and could be easily identified by participants. While it is true that most participants were concerned about the quality of raw material and desired value for money, we also heard opposing voices that outlined "if an upcycled fashion product involves materials from a luxury brand, the price will certainly be higher, but of course on the premise that it is an authentic luxury piece" (#P6). This indicates that consumer values could vary based on different product attributes, for example, high street garments versus luxury garments. The latter was seen to be of higher quality and not only more expensive but also durable. Thus, if fashion brands, such as Miu Miu are creating upcycled pieces, it is not seen to be 'waste' or 'poor quality', instead they can help to increase the value of the product (Henninger et al. 2022) and are seen to be luxury that further attracts consumer interest through being unique and often a limited edition. #P11 outlines "it depends on who is producing. If it's a good designer with decent factories, and the whole operation is mature, then I think the quality will be higher". This is quite an interesting statement, as it seems the assumption is that to have high-quality upcycled garments, they need to be produced by an established designer, rather than entrepreneurs or newly created companies. This could have implications in terms of the saleability of garments, in that those from well-known brands may be seen as having higher egoistic value, as these could be accepted by others, whilst new start-up brands may find this process challenging.

Having luxury features on the product seems to be a double-edged sword, on the one hand, luxury elements can lead to consumer's perceived high quality, durability and value for money. On the other hand, these luxury features can also lead to some negative perceived risks, with participants highlighting "it's hard to tell the origins of these luxury parts, for me I can only make judgments by appearance. This isn't like purchasing through official channels […], what if I fail to identify a fake product but someone around me recognises it" (#P11). This sentiment was further expressed by #P4 stating that "wearing a counterfeit without noticing will be very embarrassing". This implies that the egoistic value is activated when luxury elements are presented in an upcycled fashion product, since wearing a 'fake' item would be unacceptable with participants' social groupings and they place a great importance on looking good and authentic for themselves and for others.

It was interesting to see distinctions being made between upcycled products, with those that are made from luxury brand raw materials automatically being perceived as high value. Linking to the consumer knowledge aspect, luxury elements/materials used for upcycled fashion product did activate consumers' prior knowledge regarding luxury fashion products. And this prior knowledge comes into play to enable participants generate new meaning towards the concept. This implies that negative perception towards upcycled fashion products might remain unchanged if consumers learn that the raw materials used are derived from high street products, as they might hold prior consumer knowledge of high street fashion products, in that raw materials used can be of lower quality and financial value.

Conclusion and Implication

This study contributes to knowledge by demonstrating how different values were activated under varying decision situations, which has not been fully explored under the means-end theory. Within this study, various decision situations connect to diverse upcycled fashion products' attributes, as well as various levels and dimensions (e.g., new and prior) of consumer knowledge. Our findings illustrate that under the limited consumer knowledge scenario, where participants prior to fully understanding and visualising upcycling as a design concept, upcycled fashion products are negatively perceived as having inferior quality and do not have value for money (Situation 1 in Figure 2). Yet, this negative connotation is transformed into a positive attitude and activates desired values towards upcycling as a design concept, once participants gained more consumer knowledge and got a better understanding of what it entailed. Once more consumer knowledge accompanied with visuals were acquired, upcycled fashion products were described as funky, unique, and good for the environment and participants' egoistic value (i.e., self-esteem, self-expression, a sense of accomplishment) and ethical value were activated (Situation 2, Figure 2). Finally, our findings denote that different product attributes and prior consumer knowledge can trigger consumers to activate different values towards products. The incorporation of luxury elements/materials in upcycled fashion products served as a specific product attribute. This attribute, in turn, activated participants' prior consumer knowledge regarding luxury fashion products in general. Consequently, a new level of meaning and understanding emerged in relation to the concept of upcycled fashion, stemming from the accumulation of gained and prior consumer knowledge (Situation 3, Figure 2).

Previous studies that explored value and sustainable fashion consumption highlighted the role of egoistic value, in that the acceptance of self (self-esteem) is more internally driven and is not based on the perception of others (Lundblad and Davies 2016). The same study further reiterated that sustainable fashion consumers perceive values in non-economic terms. However, our findings demonstrated that egoistic value could be externally driven, seeing participants do not want to "lose face" (to be humiliated or to feel less respected) for wearing a garment that is too unique or has counterfeit luxury materials. Moreover, gaining economic value form the upcycled products is also important for participants, and their perceived economic values were based on the prior consumer knowledge towards raw materials used for the upcycled fashion products (e.g., high street vs luxury). These findings highlight again the

significance for focusing on a specific category of sustainable products, whilst considering diverse decision situations (levels and dimensions of consumer knowledge).

Although the design concept of upcycling remains relatively niche among our sample, the results highlight that communication and education can shift value perceptions, and thus, play a key part in them (participants) accepting upcycled fashion. Yet, without having a clear definition of upcycling, education could be challenging. We demonstrated that the terminology and definition of upcycling remain alien to young Chinese participants, seeing as some of them perceived it as the same as recycling, and did not see it as a design process in it is own right. This was perhaps a surprising finding, seeing as the sample chosen for this research could be seen as slightly biased, in that they all had a fashion background. Thus, more will need to be done from different stakeholders (retailers, designers, educators, and governments) to educate especially consumers on what upcycled fashion is, for them to make a conscious decision to buy-in this product type.

Whilst participants received limited consumer knowledge of upcycled fashion products, they intuitively expressed a negative attitude towards raw materials used for upcycled products. Changing terminology in communication (i.e., waste materials) to pre-loved or pre-owned materials could lead to a positive perception. Related stakeholders (e.g., retailers, designers, marketer, educators, governments) should provide consumers with a clear understanding of how pre-loved materials are transformed into useful products and how a product's quality and durability are further ensured through careful sourcing and processing. The latter aspect is vital, seeing participants showed distrust in the production process of small entrepreneurs and new start-up businesses, perceiving their products are of lower quality. Furthermore, we see egoistic and ethical values emerged as strong themes to engage participants in purchasing upcycled garments. As such, the brands can promote the unique design approaches to maximise green and emotional benefits, by further emphasising the products' background through storytelling.

It can be argued that the findings of this research are subject to methodological limitations - the limited sample size and restricted background of participants might narrow the scope of the findings. However, instead of generalising the findings to a wider population, this research aims to provide initial rich insights on the phenomenon, how Chinese GenZ early fashion adopters understand and perceive upcycled fashion products.

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