

Trade-In Programs in the Fashion Industry: A Win-Win Sustainability Strategy for Consumers and Brands

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The fashion industry is renowned for its negative impact on the environment. To mitigate the adverse effect, some companies have recently adopted the circular economy model, which introduces used clothes in good condition back into the cycle through trade-in programs. Giving used garments a second life helps reduce the company's carbon footprint and waste. It also provides consumers with an affordable and sustainable option, which is consistent with the growing trend of eco-conscious consumerism. In this study, we aim to explore consumers' perceptions of trade-in programs in the fashion industry. We also examine how companies can leverage these programs as a powerful strategic tool to build brand trust and brand affect among younger generations (such as Gen Z and Millennials). This research draws upon different literature streams on signaling theory, brand trust, and brand affect. Our findings hold significant value for managers who wish to create strategically effective trade-in programs as part of their Corporate Social Responsibility initiatives.

Keywords: trade-in programs, signaling theory, circular economy model, brand trust, brand affect, Generation Z, Millennials

INTRODUCTION

The textile industry is notorious for its significant negative impact on the environment. The production of textile products involves consuming vast amounts of water, energy, and chemicals, making it one of the most polluting industries globally (Niinimäki et al., 2020). In particular, the fashion industry's energy-intensive production methods generate 10% of global carbon emissions and 20% of water waste, making it an important contributor to climate change. The carbon emissions from fashion are even higher than those from air transportation and maritime shipping combined (European Parliament, 2020). Therefore, it is essential for fashion companies to consider the environmental impacts of their operations and take action to mitigate the adverse effects, creating a more socially responsible industry.

The United Nations Industrial Development Organization defines Corporate Social Responsibility (CSR) as “a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders” (United Nations Industrial Development Organization). Many companies have increasingly adopted CSR as a core business practice. In 2022, according to Governance & Accountability Institute, Inc. (G&A), a well-known consulting firm focusing

on corporate sustainability and ESG, 98% of the S&P 500 companies published a sustainability report, compared to 92% in 2020 (G&A, 2022). The reports feature topics such as employee health and safety, supply chain management, environmental sustainability, and community participation. By prioritizing CSR, companies can improve their reputation, build a positive brand image, increase employee engagement, and boost their long-term financial performance. However, there are specific challenges that companies may face when implementing CSR initiatives, including balancing financial goals with social responsibilities.

Two commonly adopted pathways exist in the fashion industry for companies wishing to implement environmentally friendly practices. The first pathway is the bioeconomy, which uses renewable biological resources to produce biobased materials, such as sugarcane-based polyester (Patagonia, 2023). The second pathway is the circular economy, which moves away from the traditional linear flow of “resources – products – waste” and adopts a new pattern: “resources – products – waste – renewable resources.” The circular economy considers the production of new items and the end-of-life stage (where materials are repurposed, recycled, or reintegrated into a new cycle), which reduces the amount of waste generated and promotes sustainable and more efficient use of resources. The circular economy model has been gaining momentum in the fashion industry lately. An example is using recycled cotton to produce new garments or including previously owned garments back into the cycle through trade-in programs.

Although trade-in programs have become popular in the past decades in the durable product markets (e.g., automobiles, appliances, phones), the fashion industry has still hesitated to embrace this model. It could be due to the fast-paced nature of fashion trends and the challenges in consumers’ negative perceptions of pre-owned clothing items. However, with growing concerns about sustainability and waste reduction, several fashion companies have implemented trade-in programs, such as Levi’s (Second-hand), Patagonia (Worn Wear), and The North Face (Renew), with the effort to extend the product lifecycle. These programs allow customers to exchange their used clothes for cash or future shopping credits. The companies then sell these used items to their customers through their websites.

Literature has shown that Gen Z and Millennial consumers have demonstrated a strong concern about the environment. They are more active in addressing climate change concerns than older generations, as observed in studies conducted by the Pew Research Center and Deloitte Center Integrated Research (Pew Research Center, 2021; Deloitte, 2021). Thus, in this paper, we aim to provide a comprehensive analysis of the trade-in programs in the fashion industry through the lens of consumers. Building upon the signaling theory, brand trust, and brand affect literature, we will explore and demonstrate how Gen Z and Millennials consumers perceive these programs as a signal to a company’s commitment to reduce the negative impact of fashion on the environment. In particular, we will examine how the trade-in program can influence Gen Z’s and Millennials’ brand affect and trust. Our research sheds light on the potential benefits of trade-in programs in the fashion industry and provides insights for companies looking to implement such programs. This research aims to fill this gap in the literature and help companies develop strategic marketing plans for trade-in programs.

LITERATURE REVIEW

The Fashion Industry and Circular Economy Model

Cotton plays an integral role in the fashion industry. The cultivation of cotton requires significant amounts of water, resulting in a detrimental impact on the environment. For instance, producing a single pair of jeans can consume up to 3,781 liters of water, from the initial cotton cultivation to the final delivery to the store (United Nations Environmental Programme, 2018). In the past decades, the emergence of the fast fashion business model, which focuses on producing a large volume but low-quality clothing, has had a profound impact on the environment. According to the U.S. Environmental Protection Agency, landfills received 11.3 million tons of textile solid waste in 2018, around 7.7% of all municipal solid waste landfilled (US EPA, 2018). Fashion companies have adopted two common pathways to mitigate these adverse effects. The bioeconomy pathway reduces the dependency on non-renewable fossil fuels and promotes using natural resources, such as wood, crops, and algae, to develop bioplastics, biofuels, and other sustainable materials.

An example of the bioeconomy in the fashion industry is the development of biobased polyester from biobased materials like sugarcane to reduce the usage of virgin petroleum (Lane, 2023; Zhang et al., 2021).

On the other hand, the circular economy pathway involves considering waste as a valuable resource rather than something to be discarded. With this model, products are designed to last a long time and can be reused, upcycled, or recycled. Patagonia, an American sports apparel company, won the U.N. Champions of the Earth award in 2019, a top environmental honor, for their environmental advocacy. Patagonia's efforts toward a circular economy involve recycling textile fabric waste from manufacturing (i.e., cotton scraps) or post-consumer cotton waste (i.e., old T-shirts made with cotton, hemp, or linen) to create cellulose fiber. Those fibers are then combined with other materials to create new garments. The circular economy also refers to practices introducing used clothes in good condition back into the cycle to create a closed-loop system. Giving these garments a second life helps reduce waste and environmental impact and provides an affordable and sustainable option for consumers, which aligns with the trend of eco-conscious consumerism that has emerged in recent years (Chen et al., 2023). In this research, we will focus on the trade-in program initiatives from companies.

Drivers and Barriers to Buying Second-Hand Clothing

From vintage finds to refurbished designer goods, second-hand apparel offers a unique and sustainable alternative to the fast fashion industry. This market has been growing at an unprecedented rate in recent years, with a global estimated value of \$96 billion U.S. dollars in 2021 (Statistica, 2021). An increasing number of consumers opt for pre-owned clothing for many reasons, including the economic, hedonic, and environmental benefits of purchasing second-hand clothing (Guiot & Roux, 2010). Purchasing second-hand clothing can offer consumers various economic benefits. Second-hand clothes are offered at lower prices, especially for high-end or designer items that might not have been affordable at full price (Cervellon et al., 2012; Laitala & Klepp, 2018; Borusiak et al., 2020; Ek Styvén & Mariani, 2020). Hedonic values received through the thrill of bargaining or treasure-hunting excitement while shopping are also considered a driving force for purchasing second-hand clothing (Ferraro, 2016). In addition, consumers are now more eco-conscious and place sustainability as their priority when making purchasing decisions. The Unibail-Rodamco-Westfield survey with more than 6,500 customers suggested that consumers seek products with minimal environmental impact and are willing to go above and beyond to ensure their choices align with their sustainability goals (Drenick, 2022). Consumer behavior research shows that consumers can construct and reinforce their self-identity by adopting sustainable consumption habits, bridging the gap between their actual and ideal selves (Connolly & Prothero, 2008; Bly et al., 2015).

However, multiple factors prevent consumers from purchasing second-hand clothes, one of which is the concern of contamination. Given that clothing has close contact with the skin, the mere thought that a clothing item has been previously worn can raise questions about its hygiene. This is particularly significant for individuals who value cleanliness highly and are concerned about contamination through clothes (Yan et al., 2015; Meng & Leahry, 2016). As a result, some consumers may even experience a sense of disgust or fear of purchasing second-hand clothing. Another concern consumers often express about purchasing previously owned clothing is the social embarrassment and social stigma associated with people of lower socioeconomic power (Valor et al., 2022; Lo et al., 2019; Silva et al., 2021). Clothing plays a significant role in expressing oneself and is closely linked to an individual's self-identity. Negative judgment and perceptions from peers and society can damage one's self-esteem (Zahid et al., 2023). Thus, although some consumers enjoy the economic and environmental benefits of buying second-hand clothing, they still experience anxiety about the perceived image they convey to their peers when making such purchases (Lundblad & Davies, 2016).

Nevertheless, the trend of buying second-hand items has risen in recent years, with record-breaking growth in 2022 (Offerup, 2022). Purchasing pre-owned clothing is now more socially acceptable (Thredup, 2022). The study reveals that the second-hand market is gaining popularity globally, with North America leading the way. It is expected to double by 2026, reaching \$82 billion. The second-hand clothing market exists in various forms, including collaborative consumption models and company trade-in programs, which we will discuss in the next section of this paper.

Collaborative Consumption and Company Trade-In Programs in the Fashion Industry

Although the concept has existed in the form of flea markets, consignment stores, and garage sales, Felson & Spaeth's study was the earliest research that established the definition of collaborative consumption (Felson & Spaeth, 1978). Whereas the traditional form of exchange is characterized as a dyadic relationship, including the seller and the buyer, collaborative consumption involves a triadic relationship, including the seller and the buyer, and a platform that serves as a facilitator (Benoit et al., 2017). In collaborative consumption, consumers seek to access products through a platform that connects them to a peer service provider with the products. Through this process, collaborative consumption allows for a more efficient and cost-effective way of accessing and utilizing assets (Benoit et al., 2017; Henry et al., 2021). In the fashion industry, collaborative consumption is a consumption trend "in which consumers, instead of buying new fashion products, have access to already existing garments either through alternative opportunities to acquire individual ownership (gifting, swapping, or second hand) or through usage options for fashion products owned by others (sharing, lending, renting, or leasing)." (Iran & Schrader, 2017, pp. 472). Collaborative fashion consumption is facilitated through peer-to-peer (P2P) platforms (e.g., Poshmark, Tulerie, Rent the Runway).

Although the collaborative consumption business model dominated the second-hand clothing market, some companies have recently started offering trade-in programs, which allow consumers to sell their previously owned clothing back to the company, creating a circular economy. With the trade-in programs, companies incentivize consumers to dispose of their used clothing properly, reducing textile waste in landfills. Consumers also benefit from affordable clothing options, reducing the need to buy new clothes. Research has suggested that trade-in programs can help companies improve sales, retain existing customers, acquire new customers, or increase customer switching costs considering changing brands (Dong et al., 2023). Manufacturers of durable products, such as automobiles, appliances, and phones, often utilize trade-in programs, yet this practice is still very limited in the fashion industry. Patagonia's Worn Wear, Levi's Second Hand, and The North Face's Renew are a few initiatives that allow customers to trade their no-longer-wanted clothes for future shopping credits. Companies publicly advertise these initiatives on their main website and encourage consumers to buy used clothes to extend the life of clothing, which can help to reduce carbon, waste, and water footprints, even though these second-hand clothing can potentially cannibalize their new products.

The Signaling Effect of Company Trade-In Initiatives on Consumer Perceptions

The signaling theory is a conceptual framework first developed to analyze situations where sellers and buyers face asymmetric information in the marketplace. The four elements involved in the signaling process are the signaler, the signal, the receiver, and the feedback (Spence, 1974; Connelly et al., 2011). In the business-to-consumer (B2C) context, the signaler refers to the company that transmits information about its strategies to its target audience, usually the consumers. In this case, the receiver is the consumer who receives the signals and processes the information to make informed decisions. On the other hand, signals are the messages the signaler sends to the receiver to influence their decisions (Connelly et al., 2011). One of the fundamental concepts of signaling theory is that companies use observable actions to signal their unobservable qualities, such as their underlying capabilities and prospects, to potential customers (Reuer & Ragozzino, 2014), thereby creating value for both the customers and the company.

In this research, we will focus on how companies' trade-in programs, as part of their CSR initiatives, serve as a signal that can help to influence consumers' perceptions toward the brand positively. More specifically, consumers perceive trade-in programs offered by fashion manufacturers as their efforts toward sustainability to reduce waste from the fashion industry, building a positive brand image. We also propose that the trade-in program signals consumers that the product is of good quality, can last for a long time, and is socially desirable, opposite to the concept of fast fashion (i.e., large volume, low quality, not long-lasting). As a result, the trade-in program will positively affect consumers' brand attitudes, such as perceived brand sustainability, brand trust, and brand reputation.

Brand reputation and *brand trust* play an essential role in consumer decision-making. Research has shown that consumers perceive a seller's reputation as a quality cue or a form of warranty (Hamzaoui-

Essoussi & Linton, 2014), and consumers prefer purchasing used products through a reputable seller (Subramanian & Subramanyam, 2012; Van Weelden et al., 2016) or the original manufacturer (Agostini et al., 2021). The reputation of a fashion brand can significantly influence consumers' purchase likelihood (Park-Poaps & Kang, 2018). Morgan and Hunt (1994) identify trust as one of the critical factors in relationship marketing success. At the brand level, Chaudhuri and Holbrook (2001) define trust as the consumer's willingness to rely on a brand's ability to perform its stated function. Little research in the fashion industry has looked at the effect of trade-in programs, as part of a firm's CSR initiatives, on consumers' brand attitudes and trust. We further propose that although the trade-in program can signal companies' commitment to the environment in the B2C settings, it does not similarly affect the collaborative consumption of P2P platforms. The collaborative consumption P2P platforms act as intermediaries to facilitate business transactions between sellers and buyers. Consumers perceive collaborative consumption as a sustainable business model but a CSR initiative (Pedersen & Netter, 2015; Dreyer et al., 2017).

Generation Z's and Millennials' Perception Toward the Environment

Consumers' environmental concerns are an additional factor that can impact a consumer's perception of fashion companies' commitment to CSR. Recent research has demonstrated that younger generations, such as Gen Z (18 – 26 years old) and Millennials (27 – 41 years old), have a heightened awareness of environmental issues. A survey from First Insight revealed that 73% of Gen Z were willing to pay more for sustainable products than every other generation. Despite being predominantly students who have low disposable income, 54% of Gen Z stated they would pay over 10% more for sustainable products (First Insight, 2020; Jahns, 2021). One of the barriers to purchasing second-hand clothing discussed earlier in this paper is the social stigma associated with people of lower socioeconomic power. However, recent studies in influencer marketing suggested that purchasing second-hand clothes as a sustainable lifestyle has increasingly become popular on social media platforms. Many social media influencers now start to promote the concept of ethical fashion and encourage their followers to adopt this sustainable approach. (Oscario, 2023; Mohammad et al., 2021; Page & Hur, 2023). Therefore, younger generations like Gen Z and Millennials, who rely heavily on these influencers' recommendations, tend to be more accepting of the circular economy model, including trade-in programs.

According to the signaling theory, receivers lack information about the company but would like to receive this information. Receivers can gain directly or in a shared manner with the signaler by making decisions based on the information provided by the signals. The signaling process helps ensure that the receivers have access to relevant and valuable information that can assist them in making informed choices (Connelly et al., 2021). Gen Z and Millennials have high environmental concerns and actively seek products from companies prioritizing sustainability. Supporting the companies that signal sustainability would benefit these consumers because their values align with the companies' values to leave a positive impact on the planet. As discussed in the previous section, the trade-in program signals unobservable attributes to potential consumers, such as the company's commitment to protecting the environment (Miller et al., 2009; Rivoli & Waddock, 2011). Gen Z and Millennials value these unobservable attributes; thus, they may develop positive brand attitudes toward the company.

METHODOLOGY

Participants, Design, and Method

Participants

We recruited 220 participants on Amazon Mechanical Turk (MTurk), a popular platform for data collection. We understand that certain challenges in using MTurk workers are inattention, self-selection bias, and inconsistent English language fluency (Aguinis et al., 2021). Thus, we followed Aguinis et al.'s recommendations to address these challenges. More specifically, we paid additional fees to set qualifications for the MTurk workers as follows: (1) HIT approval rate of at least 95%, (2) location in the U.S., and (3) the number of HITs approved greater than 100. Setting the qualifications helped us mitigate

the adverse effects of self-selection bias and inconsistent English language fluency. We also addressed the issues of MTurk workers' inattention by placing two attentional checks throughout the survey, as Agle et al. suggested (2022), to ensure that our data is reliable and high-quality. We excluded the data of nine participants who failed the attentional check. Thus, the final data set includes responses from 211 participants (49.8% female). Our dataset is comprised of Gen Z (18 – 26 years old), Millennials (27 – 41 years old), and Gen X (43 – 58 years old). It is noteworthy that since we found no differences in responses between Gen Z and Millennials, we combined these two age groups. Table 1 summarizes our participants' demographics.

TABLE 1
PARTICIPANTS' DEMOGRAPHIC VARIABLES

Demographic Variables	
<i>Gender</i>	
Male	106 (50.2%)
Female	105 (49.8%)
<i>Age</i>	
Gen Z	38 (18%)
Millennials	88 (41.7%)
Gen X	85 (40.3%)
<i>Ethnicity</i>	
White	142 (67.3%)
Black or African Americans	14 (6.6%)
Hispanic	12 (5.7%)
Asian	35 (16.6%)
Other	8 (3.8%)
<i>Education</i>	
Highschool graduate	49 (23.2%)
2-year degree	31 (14.7%)
4-year degree	108 (51.2%)
Professional degree	23 (10.9%)
<i>Purchased second-hand clothes before</i>	
Yes	164 (77.7%)
No	47 (22.3%)

Design and Method

This study explores consumers' perceptions of fashion companies' trade-in programs as part of their CSR initiatives and how this perception can influence consumers' brand affect and trust. According to signaling theory, consumers perceive the trade-in program as a signal that the companies are committed to protecting the environment, leading them to develop brand affect and brand trust. As discussed earlier, we combined these two age groups since our data showed no significant differences between Gen Z and Millennials. The study employed 3 (conditions: T.I. – a company with a trade-in program vs. NTI – a company without a trade-in program vs. CC – a P2P collaborative consumption platform) x 2 (age groups: Gen Z and Millennials vs. Gen X). At the beginning of the study, we asked participants several questions, such as "Have you ever purchased second-hand clothes?" and if participants chose "yes," they would be directed to the next question: "Please indicate how important the following reasons are when choosing to buy second-hand clothing" from 1 = extremely unimportant to 7 = extremely important. The choices are (1) economic reasons, (2) product quality, (3) hedonic experience (the thrill of bargaining or treasure-hunting excitement), and (4) sustainability (use garments that have not yet finished their lifecycle) (Colasante & D'Adamo, 2021).

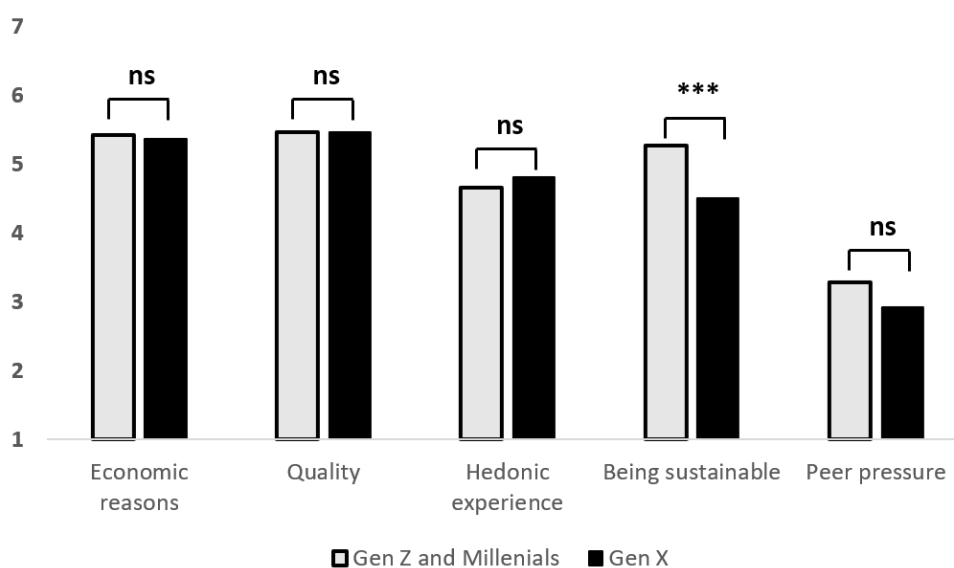
Next, participants were randomly assigned to one of the three conditions discussed earlier. We used a hypothetical company (i.e., Mizuno) to ensure that all participants had no existing knowledge or attitudes toward the company that could influence their brand affect or brand trust. Participants in the NTI condition read a description of a company named Mizuno that specializes in sports apparel for both men and women. Participants in the T.I. program read descriptions about the same company, with additional information that the company offers a trade-in program where participants could trade their previously worn clothes for future shopping credits. Participants in the CC condition read descriptions about Mizuno as a social commerce marketplace where users can buy and sell second-hand sports apparel. Both participants in the T.I. and CC conditions read an additional sentence: “Using this trade-in program/online marketplace platform, customers can extend the life of clothing by an extra nine months, which can help reduce carbon, waste, and water footprints by roughly 20 – 30% each”. Please see Appendix. We then asked participants to rate the extent to which the brand was sustainable using a Likert scale (1 = strongly disagree to 7 = strongly agree). We then measured participants’ brand trust and brand affect using the scales developed by Chaudhuri & Holbrook (2001). Last but not least, we asked participants to provide their demographic information, such as age, gender, income, ethnicity, and education.

Results

Reasons for Purchasing Second-Hand Clothes

A frequency analysis suggested that most participants (77.70%) had previously purchased second-hand clothes. We further examined the reasons for buying second-hand clothes by asking participants to indicate the importance of the reasons for them to purchase second-hand clothes (i.e., economic reasons, quality, hedonic experience, sustainability, and peer pressure). Results of a series of Independent sample t-tests revealed that Gen Z and Millennials were more likely to purchase second-hand clothes because of sustainability reasons (i.e., to use garments that have not yet finished their lifecycle ($M = 5.27$ vs. $M = 4.21$, $t(162) = 3.18$, $p < .001$). Moreover, there was no significant difference between different age groups (i.e., Gen Z and Millennials vs. Gen X) regarding other reasons (Figure 1).

FIGURE 1
REASONS FOR BUYING SECOND-HAND CLOTHES

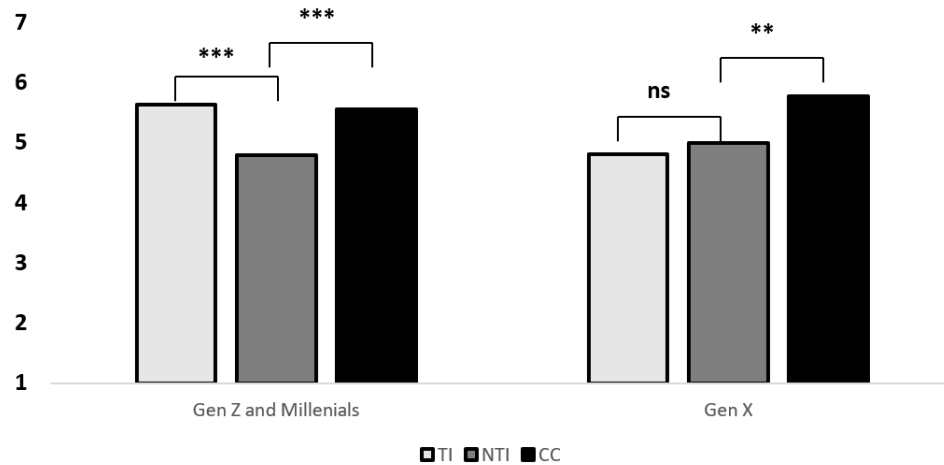


Notes: * $p < .05$; ** $p < .01$; *** $p < .001$ (two-sided)

Perceived Brand Sustainability

A two-way ANOVA was analyzed to explore the effect of the conditions (T.I. vs. NTI vs. CC) and age groups (Gen Z and Millennials vs. Gen X) on perceived brand sustainability (i.e., “This brand is sustainable”). The simple main effect of the condition was significant ($F(2,205) = 12.26, p < .001$). Further, the interaction between conditions and age groups was significant among Gen Z and Millennials ($F(2, 205) = 11.58, p < .001$) and Gen X. Inspection of the means revealed that Gen Z and Millennials who were in the T.I. condition ($M = 5.64$) and CC condition ($M = 5.56$) perceived the brand as more sustainable than did Gen Z and Millennials in the NTI condition ($M = 4.79, p < .001$). The interaction between conditions and age groups was also significant among Gen X ($F(2, 205) = 8.94, p < .001$). Inspection of the means revealed that Gen X who were in the CC condition perceived the brand as more sustainable ($M = 5.77$) than Gen X participants in the NTI condition ($M = 5.00, p < .01$) and in the T.I. condition ($M = 4.81, p < .001$) (Figure 2).

FIGURE 2
PERCEIVED SUSTAINABILITY

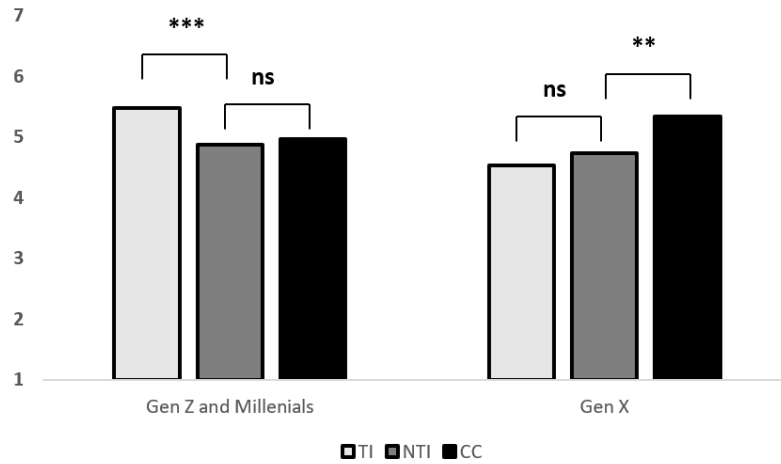


Notes: * $p < .05$; ** $p < .01$; *** $p < .001$ (two-sided)

Brand Affect

We combined three items of brand affect (“I would feel good when I used this brand,” “This brand would make me happy,” and “This brand would give me pleasure”) to create an index ($\alpha = .92$). A two-way ANOVA was analyzed to explore the effect of the conditions (T.I. vs. NTI vs. CC) and age groups (Gen Z and Millennials vs. Gen X) on brand affect. The simple main effects of conditions and age groups were not significant ($p > .15$). Further, the interaction between condition and age group was significant among Gen Z and Millennials ($F(2, 205) = 4.05, p < .05$) and Gen X ($F(2, 205) = 4.61, p < .05$). Inspection of the means revealed that Gen Z and Millennials who were in T.I. condition ($M = 5.48$) showed a higher level of brand affect than did Gen Z and Millennials who were in the NTI ($M = 4.87, p < .01$) or the CC condition ($M = 4.97, p < .05$). The interaction between conditions and age groups was also significant among Gen X ($F(2, 205) = 4.62, p < .05$). Inspection of the means revealed that Gen X consumers who were in the CC condition ($M = 5.34$) showed a higher level of brand affect than did Gen X consumers who were in the NTI ($M = 4.73, p < .05$) or the T.I. condition ($M = 4.53, p < .05$) (Figure 3).

**FIGURE 3
BRAND AFFECT**

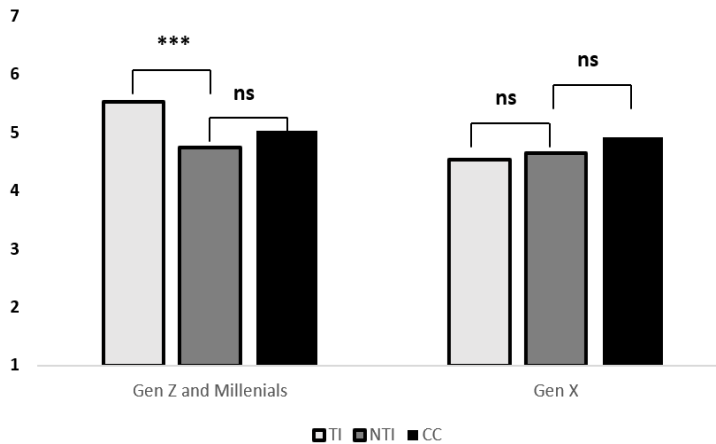


Notes: * $p < .05$; ** $p < .01$; *** $p < .001$ (two-sided)

Brand Trust

We combined four items of brand trust (“I trust this brand,” “I rely on this brand,” “This is an honest brand,” and “This brand is safe”) to create an index ($\alpha = .80$). A two-way ANOVA was analyzed to explore the effect of the conditions (T.I. vs. NTI vs. CC) and age groups (Gen Z and Millennials vs. Gen X) on brand trust. The simple main effect of conditions was marginally significant ($F(2,205) = 2.70, p = .07$), and the simple main effect of age groups was significant ($F(1,205) = 10.34, p < .01$), indicating that Gen Z and Millennials showed a higher level of brand trust than Gen X ($M = 5.10$ vs. $M = 4.70$). Further, the interaction between conditions and age groups was significant among Gen Z and Millennials ($F(2, 205) = 9.03, p < .001$). Inspection of the means revealed that Gen Z and Millennials who were in the T.I. condition ($M = 5.53$) showed a higher level of brand trust than did Gen Z and Millennials who were in the NTI ($M = 4.74, p < .001$) or CC condition ($M = 5.02, p < .01$). The interaction between conditions and age groups was not significant among Gen X ($F(2, 205) = 1.56, p = .21$), indicating that there was no difference in brand trust across conditions among Gen X (Figure 4).

**FIGURE 4
BRAND TRUST**



Notes: * $p < .05$; ** $p < .01$; *** $p < .001$ (two-sided)

DISCUSSION

Our study revealed several interesting findings. First, we found that Gen Z and Millennials are more inclined to purchase second-hand clothes to extend the product lifecycle and reduce textile waste to the environment than Gen X. This shift in behavior is primarily driven by the growing concern among Gen Z and Millennials about the negative impact of fashion on the environment. Second, although Gen Z and Millennials perceived the company with a trade-in program and the P2P collaborative consumption platform as sustainable, they only showed a higher level of brand affect and brand trust in the company with a trade-in program (vs. the P2P collaborative consumption). This result is consistent with our proposition that a company's trade-in initiative can signal its commitment to sustainability to consumers, leading them to develop a higher level of brand trust and brand affect.

In contrast, the P2P collaborative consumption platform operates on the business model of buying and selling second-hand clothes. While this is perceived as a sustainable practice, consumers do not necessarily view it as a direct commitment to sustainability from the company. To Gen Z and Millennials, the P2P platform simply provides the service to facilitate exchange between individuals rather than actively making efforts to reduce negative environmental impact. We provide evidence that trade-in programs can serve as a powerful strategic tool for fashion companies to demonstrate their commitment to sustainability and social responsibility. By implementing such programs, companies can foster customer brand affect and trust, ultimately driving long-term brand loyalty. Thus, fashion companies targeting Gen Z and Millennials can leverage trade-in programs to align their values with the values of their customers, which can eventually help differentiate themselves in the marketplace.

Our research has several limitations that can be addressed in future studies. First, our study primarily focused on examining the attitudes and trust that Gen Z and Millennials have towards the company in question. We did not investigate other behavioral constructs, such as consumers' intention to purchase the company's products or willingness to pay. In addition, we did not explore whether the development of positive attitudes and trust will lead to consumers' willingness to purchase used clothes or they would still prefer new garments from the brand despite the positive perception of a particular brand. Therefore, future studies can be conducted to gain a comprehensive understanding of the issue. Second, the results showed that Gen X consumers developed positive attitudes toward the P2P collaborative consumption platform. Nevertheless, their positive attitudes do not translate into a higher level of brand trust, which refers to the level of confidence that a brand can deliver on its promises for the P2P platform. It is speculated that Gen X consumers are more inclined to this business model due to their interest in community sharing. However, further studies are required to gain deeper insights into the factors influencing brand trust in P2P collaborative consumption platforms.

Another pertinent question we wish to explore in future research is how fashion companies can develop a strategic plan to implement effective trade-in programs, which can help build a loyal customer base while simultaneously providing a sustainable solution for the disposal of used garments. One of the important factors that companies need to consider is the optimal price point. The trade-in price should be competitive enough to incentivize consumers to participate in the programs but also profitable for the company. Moreover, companies offering trade-in programs must be aware of the potential risk of product cannibalization. Used garments from trade-in programs may potentially reduce consumers' demand for new products, affecting the company's sales and revenues. It is crucial for companies to clearly define their objective and decide whether they should prioritize the environmental benefits of second-hand clothing over their own benefits or vice versa. To counteract the negative effects of cannibalization, companies can consider increasing their market share by advertising the trade-in programs to the consumer segment who would not otherwise purchase their products due to high prices.

In summary, companies can strategically utilize trade-in programs as an effective tool to enhance consumer brand affect, build brand trust, and ultimately establish consumer brand loyalty. Implementing these programs can be a win-win-win situation for companies, consumers, and the environment. Consumers can enjoy more affordable options and feel good about their environmentally-friendly purchases. At the

same time, companies can increase their market share and competitive advantage while showcasing their commitment to sustainability efforts.

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APPENDIX: COMPANY DESCRIPTION STIMULI

A Company With a Trade-In Program (TI Condition)

Mizuno is a fashion brand specializing in first-grade sports apparel for both women. The company has earned a reputation for fine materials, excellent craftsman construction, and definitive design. Mizuno menswear and ladieswear offer a wide selection of waterproof jackets, hoodies, fleeces, and shirts with the latest weather-beating technology. Mizuno has just implemented a trade-in program where customers can return their used clothing to receive future shopping credits. Using this program, customers can extend the life of clothing by an extra nine months, which can help reduce carbon, waste, and water footprints by roughly 20 – 30% each.

A Company With No Trade-In Program (NTI Condition)

Mizuno is a fashion brand specializing in first-grade sports apparel for both men and women. The company has earned a reputation for fine materials, excellent craftsman construction, and definitive design. Mizuno menswear and ladieswear offer a wide selection of waterproof jackets, hoodies, fleeces, and shirts with the latest weather-beating technology.

P2P Collaborative Consumption (CC Condition)

Mizuno is a social commerce marketplace where users can buy and sell second-hand first-grade sports apparel for both men and women. The company has earned a reputation for high-quality products. Mizuno menswear and ladieswear offer a wide selection of waterproof jackets, hoodies, fleeces, and shirts with the latest weather-beating technology. Using this platform, customers can extend the life of clothing by an extra nine months, which can help reduce carbon, waste, and water footprints by roughly 20 – 30% each.