Research Article

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Take-back programs: analysis of millennial participation in alternative clothing disposal methods

Abstract

Purpose: This study aims to better understand the relationship between millennial consumers and brand or retailer clothing take-back programs. By analyzing general awareness and willingness to participate in these initiatives, inputs such as trust and brand loyalty are evaluated to understand its influence on behavior. Basic demographics were collected to better understand sample representation. A 5-point Likert scale was used to evaluate feelings and beliefs millennial consumers had towards take-back programs. To further analyze the data, a top-two box approach was utilized to predict the execution of the behavior evaluated. The results indicated that there was a general lack of awareness in terms of take-back programs from millennial consumers. In addition, there was confusion between take-back programs and other alternative means of clothing disposal. The data also provided the conclusion that trust amongst millennial consumers and sustainability claims from brands and retailers are low. Finally, personal brand loyalty influenced the willingness to participate in brand and retailer take-back programs. This research uses theory of reasoned action and theory of planned behavior to better understand consumer awareness of take-back programs. The paper addresses awareness of brand or retailer clothing take-back programs and the relationship trust and brand loyalty has on consumer participation.

Keywords: take-back programs, consumer behavior, trust, brand loyalty, consumer awareness

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Introduction

The textile and apparel industry is one of the largest producers of pollution and waste in the world. Major contributors of this phenomenon are processes such as dyeing, finishing, washing and waste as a result of the disposal of textile products and apparel garments.[1] In 2013 the Environmental Protection Agency (EPA) released data surrounding the municipal waste created by the textile and apparel industry. The EPA found 30 billion pounds of textile waste was created in the US per year. From that amount of waste, only approximately 15 percent was recycled or donated, resulting in about 25 billion pounds of discarded clothing and textile waste end up in landfills every year.[2,3] In 2015, the EPA released an updated report that showed an increase in textile and apparel waste produced, 32 billion pounds. However, only 21 billion pounds were sent to landfills, resulting in the estimating that nearly 35 percent of textiles and apparel waste being recycled.[4] Indicating a decrease in the amount of waste of textile and apparel waste sent to landfill. However, it is important to note there is some conflicting data. This research will specifically focus on the steps consumers are taking to divert products from going to landfills.

There are many ways consumers can take part in decreasing the negative sustainable impacts of the textile and apparel industry. Two of these are to 1) participate in sustainable consumption and 2) use alternative disposal methods of clothing and textiles. Sustainable consumption is the use of products that support the needs of the present without interfering with the ability of the future to meet their own needs.[3] Within the scholarly discipline of clothing and textiles focused on sustainability, a goal is to better understand and change the affect individual buying power has on social and environmental impacts.[5,6]

Alternative disposal methods simply refer to finding ways to discard materials than the landfill. Examples of this include passing items to friends or family, recycling, donating, or swapping.[7,8] This research will specifically focus on the unique donating method of retailer or brand take-back programs. Textile take-back programs are used by manufacturers, brands or retailers to collect used clothing or other textile related products from consumers. The materials are reintroduced in the supply chain creating a cyclical effect.[9] This is a common emerging trend among retailers and brands that has little research investigating consumer behaviors and the benefits to brands.

Literature review

Circular economy

A concept that has stemmed from the development of sustainability in various industries, is the circular economy business model. The goal behind this model is to keeps resources and materials in use beyond their typical end of life stage.[10] One definition that attempts to encompass the entire concept is "a circular economy is an alternative to a traditional linear economy, which relies on the extract, make, use and dispose model, to one in which resources are kept in use for as long as possible, the maximum value from those resources are extracted while in use, and then products and materials are recovered and regenerated at the end of each service life."[11] Essentially, the take-make-waste model is discarded and transitioned to a take-make-reuse strategy as an alternative.[12]

A prominent leader in this transition in business models is the Ellen MacArthur Foundation. This organization rethought the supply chain to eliminate waste, reduce consumption of limited resources and incorporate a replenish/rebuild system.[10] The linear business model is repurposed into a circular system that reuses materials and restore the sources used.[12] The incorporation of a circular economy requires participation from everyone in the supply. Instead of thinking cradle to gate, the notion of cradle to cradle must be the core of the infrastructure.[11]

In 2014, circular fashion emerged in Sweden through introductions via H&M and their consultant Dr. Anna Brismar. Dr. Brismar used the idea circular fashion when planning for a fashion event in Stockholm.

H&M used the term internally until July 2014 during a public presentation.[13] Essentially this concept is achieved through long-lasting designs, versatile pieces, and utilizing the 5 R's of recycling, refuse, reduce, reuse, repurpose, recycle.[14] According to Dr. Brismar circular fashion can be defined as "clothes, shoes or accessories that are designed, sourced, produced and provided with the intention to be used and circulate responsibly and effectively in society for as long as possible in their most valuable for, and hereafter return safely to the biosphere when no longer of human use."[13]

Post-consumer textile and apparel waste

The textile and apparel industry in one of the most wasteful market segments with consumer disposal habits being a major contributor.[1] Consumers dispose of apparel for many reasons including poor fit, outdated style, garment being worn out, or simply cleaning out closet and wanting something new.[15] With the increase in availability and the rise of fast fashion, clothing is now considered a disposable good by many consumers, which is greatly affecting the amount of waste produced.[16] However, consumers are beginning to recognize the impact of their actions and a decrease in the amount of clothing disposed of in landfills is decreasing. In 2018 the Environmental Protection Agency (EPA) released data surrounding the municipal waste created by the textile and apparel industry. The EPA found 17 million tons of textile waste was created in the US per year. From that amount of waste, only approximately 15 percent was recycled or donated, resulting in about 11.3 million tons of discarded clothing and textile waste end up in landfills every year.[4] On average, 95 pounds of textiles are produced in the US per person per year. Of that produced, 81 pounds of textiles are thrown away per person and end up in landfills annually.[2]

As consumers become more aware of the impact their actions have on the environment, alternative means of clothing disposal have increased in consumer use. Consumers are faced with options to discard, donate, trade, reuse, or sell the unwanted item. In addition, the industry has introduced additional strategies, including recycling, re-use, repair repurpose and redesign to avoid putting garment in landfills.[17,18]

One strategy that has been common among consumers for many decades is the use of second-hand clothing. An entire market has been developed of second-hand clothing with the development of resale strategies and thrift and donation services.[19] Simply put, second-hand clothing is the consumption of all used apparel.[20] This method has increased the number of consignment stores, thrift stores, and boutique business models.[8] In fact, as of 2018 there are more than 25,000 resale stores, consignment boutiques and not for profit resale shops in the United States.[21]

Consumers are often attracted to this method of shopping due to the lower prices, wide range of products, unique options and products of higher quality.[8] Approximately 16-18% of Americans shop at second-hand clothing stores. In addition, 12-15% shop at consignment/resale shops specifically. This indicates that there is a market for this retail strategy. Examples of retailers that use resale strategy include Poshmark, thredUP, Plato's Closet, Goodwill and other thrift or consignment store type of retailers.[21]

Recycling is an additional strategy to reduce the amount of textile waste consumers put into the environment. Consumers do participate in recycling behaviors; however, a very low percentage of shoppers are actively engaged.[22] With this strategy, the goal is to repurpose a discarded garment into an alternate value-added product. Types of recycling include, upcycling, repurposing other garments, recycling garments into wipes, and transforming textiles and garment into a non-apparel good.

Retailers are also investing in the recycling of textiles and apparel. As stated before, it is often difficult to recycle textile and apparel products. This is due to the challenge of separating the mixed components of a garment.[16] However, new technologies have been developed to create greater ease in the recycling process that retailers, brands and manufacturers have access to as compared to consumers. Brands such as Nike and Patagonia are recycling materials from production as well as discarded apparel and footwear to make new products.

Take-back programs are another alternative form of apparel and textile disposal. This strategy is a way for both the consumer and the brand or retailer to work together in sustainability. This research will specifically look at this method of disposal and evaluate the participation of consumers.

Take-back programs

Take-back programs have been successfully implemented in other industries and are a system of having a product returned to the original brand or retailer when the consumer is ready to discard the good. This strategy was first seen in the pharmaceutical industry, where consumers can return unused drugs.[23] Apparel retailers and brands saw an opportunity to adopt a similar strategy. In the textile and apparel industry take-back programs are an alternative disposal method of clothing where consumers bring discarded clothing to retailers and may receive a small incentive such as a discount on next purchase or coupon.[9] For example, Patagonia's program uses the incentive of $20-$100 per item donated through the take-back program.[24] These programs are intended to connect both the retailer and the consumer in the disposal process.

This alternative disposal method has been around for many years as innovative companies began integrating these programs in their business models. In fact, Nike Regrind program celebrated its 25th anniversary in 2019.[25] This alternative disposal method is gaining more recognition and becoming part of the emerging resale market in the apparel industry.[26] The products are either recycled and broken down into individual components or resold after being fixed and cleaned. Some of the major competitive advantages, include increased brand loyalty, brand image, store traffic, and improved corporate social responsibility.[9]

This collaboration between retailers and consumers offers significant benefits. The relationships can become stronger between the two parties, lower cost of goods that are secondary material supplies, reduces the use of raw materials, reduce hazardous chemical materials, and ultimately reduce the impacts the industry has on the environment.[27] Take-back programs also offer a way to get consumers into the store. When consumers are going to donate items, they are likely to look around, possibly resulting in a purchase. Through the development of fast fashion, impulse buying has significantly increased in the apparel industry.[28] With this attitude prominent in the industry, brands and retailers can use take-back programs as an opportunity to increase impulse buying while simultaneously reducing waste sent to landfills.

As take-back programs begin to integrate into the textile and apparel industry, some challenges have occurred. One obstacle that many companies have faced is building trust with the consumer. Brands such as Burberry and H&M have been caught burning excess clothing. Both of these events were trending on social media, causing consumers to lose trust in the integrity of the brands.[29] As a side effect of the brands being caught burning product, consumers now distrust what retailers and brands are actually doing with the goods collect

through these take-back programs. With this study, trust is evaluated to better understand how the consumer views these sustainability claims and initiatives of brands and retailers.

Consumer and company relationships

A genuine sustainable strategy cannot be successful without considering the consumer as part of the supply chain.[30] Over the past few decades, the consumer has gained more power in the industry. Beginning in the 1980s, the textile and apparel industry began moving from a push to a pull marketing system.[31] This has been a transformational change coinciding with the emergence of consumer centric business models. Understanding consumer behavior is of increased importance due to the transition in focus. Brands and retailers must conduct and implement research to understand consumer behaviors. Consumer behavior is the process of understanding the select, purchase, use or dispose of product or services that are necessary to make decision.[32] The results can then be applied to develop a marketing strategy that is better suited for today's shoppers.

Studying consumer behavior is an ongoing process that is between the consumer and brands and retailers. The consumer decision process are the steps an individual must take to make a purchase decision. Consumer Decision Process (CDP), presented by Blackwell, breaks this model into seven steps as seen in Figure 1.[33,34] The process is divided into three phases; pre-purchase (steps one-three), purchase (step four), and post purchase (steps five-seven).[32] Although this process is modeled in a linear fashion, the method is continuous. The post purchase decisions affect need recognition and views of the brand or retailer.
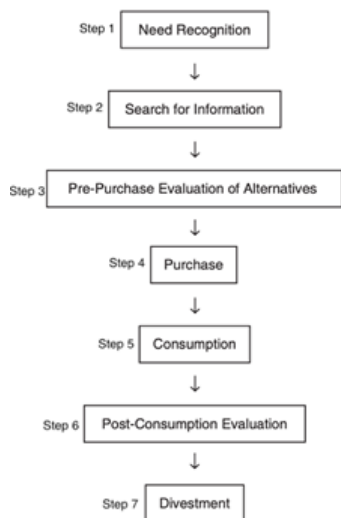

Figure 1 Consumer Decision Process (CDP).[33]

As this change has grown, the conversation between retailers and brands began. This communication continued to expand as technology and the internet emerged throughout the industry.[35] While technology has become more prevalent in the everyday life of consumers, it can encourage the sense of looking for the next best thing. Consumers are moving away from wanting basic products and are looking for new and improved items.[36] Technology has given customer access to more brand and retailer information, product information, and pressure from peers.[37]

Theories

In this research, two behavioral theories, theory of reasoned action (TRA) and theory of planned behavior (TPB), were used

to support the hypotheses and understand the psychology behind consumers' willingness to participate in take-back programs. Both of these attempt to predict the future behavioral decisions of consumers based on attitude, subjective norms.[38] These models have been widely used in the various industries to understand the motivations behind consumers' behavior and purchase decisions.[39]

The theory of reasoned action stems from the Fishbein model to make better predictions of human behavior and intentions.[32,38] It is based on the idea that humans make systematic decisions to avoid disappointing other and achieve the desired results.[40,41] A breakthrough in this model was the fact that influence of other people were considered as seen in Figure 2: Theory of Reasoned Action. The model is derived from Fisbein and Ajzen research in adopting the original Fishbein model.[42] The model breaks down the informational inputs humans receive to make.
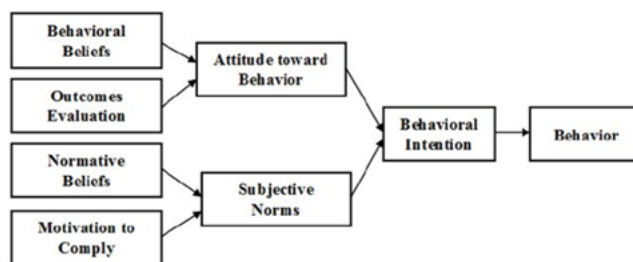

Figure 2 Theory of Reasoned Action Model (TRA).[42]

TRA focuses on analyzing the effects attitude toward the behavior and subjective norms have on behavioral decisions of humans. According to Solomon,[31] the theory evaluates the perceived effects of the behavior from the decision maker. Attitude focuses on the "strengths of beliefs about owning and using the product and evaluations of those beliefs."[40] With that said, according to Octav-Ionut, there are two inputs considered when forming an attitude toward a behavior. These include, behavioral beliefs and outcomes evaluation and can be seen in Figure 2.[41,42] Behavioral beliefs are the attributes or outcomes that an individual can associate with the intended behavior.[39] Outcome evaluations is simply the weighted value or strength one places on the consequences of a behavior.[41] In Figure 2, the model depicts these factors and their effects in the TRA school of thought.

The second major factor in the TRA is the effects of subjective norms. This element of the theory accounts for the social pressure an individual perceives of the behavior.[40] This model takes into consideration external factors that an individual may experience. Subjective norms represent the correlation between behavior and a reference group.[41] With that said there are two factors that are used to measure this element; normative belief and motivation to comply.[31] Normative belief is the strength that reference groups approve or disapprove the behavior.[39] Motivation to comply represents the extent one takes others' possible reactions into consideration.[31]

The theory of planned behavior (TPB) is an extension of TRA developed by Icek Ajzen.[39] The model incorporates perceived behavioral control as an additional factor in explaining a human's behavior.[41] Figure 3: Theory of Planned Behavior-TPB was developed by Ajzen to depict the factors that are believed to affect a behavior (Ajzen, 1991). Here, subjective norm and attitude toward behavior have the same meaning and effect as in TRA. However, perceived behavior control was added to increase the predictive nature of TRA (Zheng & Chi, 2014).
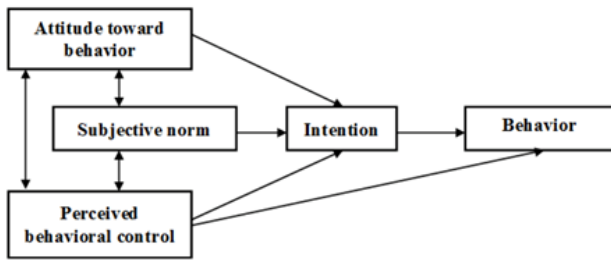
Figure 3 Theory of Planned Behavior (TPB). (Ajzen, 1991).

The factor, perceived behavior control takes into consideration situational elements both external and internal.[41] External refers to the perceptions of personal outside conditions such as time and money. Internal perceived behavior control is associated with the individual's power over resources such as skill, ability and performance.[43] With this, perceived behavioral control is predicted to have an effect on both intention and behavior.[38] By having this unique feature, researchers are able to better understand the human psychology on intention versus behavior.

With this background information and the understanding of how various types of inputs affect consumer behavior, four hypotheses were developed. The hypotheses are listed below:

H1: There is a lack of awareness in millennial consumers of brand and retailer take-back programs.

H2: There is a lack of trust in millennial consumers of the sustainability actions brands are retailers are initiating.

H3: Brand loyalty increases for millennial consumers who participate in retailer or brand take-back programs

H4: Millennial consumers are more likely to use take-back programs from brands they trust or have strong brand loyalty.

Methods

Sample and data collection

For this research, a self-administered survey was distributed via emails from the researcher. The survey was distributed in September 2019. The survey was designed to be completed in 5-10 minutes. To maintain anonymity and security of information, the Qualtrics, survey program was used. A compliance form was imbedded in the survey, and compliance was accepted when respondents click on the link to begin the survey.

Participants were gathered through friends and families of the researcher and connections to various groups and organizations,

meaning a convenient sample was used. Since the research is focusing exclusively on the Millennial consumer, the operational definition of this generation will be used. Participants are between the ages of 20 and 40 years old, born between 1979-2001. Respondents will also have various backgrounds, education levels, and stages in life.

Instrument

The survey was designed to gain insight regarding the millennial consumer and their thoughts and behaviors toward retailer and brand take-back programs. The questionnaire was developed based on various models from Koch and Domina and adapted to fit the context of the study. General demographic information of age, gender, ethnicity, education, employment status, marital status and income was collected.

To determine the sustainable behaviors of participants, models developed by Koch and Domina were used. The models evaluate the general recycling behaviors practiced and the textile disposal behavior. (Koch & Domina, 1997; Koch & Domina, 1999) All of the models have been adjusted to a five-point Likert scale for implication. The end of the survey narrows the focus to specifically look at the behavior of participants towards take-back programs.

Results

Demographic profile

Of the 297 respondents, approximately 72 percent identified as female, and 26 percent identified as male. Approximately 58 percent of respondents had a college bachelor's degree, this was the most common highest level of education. Income was another demographic that was analyzed. Income was diverse ranging from below $20,000 to over $100,000. The responses ranged between approximately 11 percent, which was an income of $81,000 to $100,000, to over 20 percent, which was an income of over $100,000.

Information was also collected in regard to participants stage of life. This included information about employment status, marital status, and parental status. Approximately 54 percent of the participants identifying as working full-time, resulting in a majority of the respondents in this life stage. Marital status was another demographic analyzed to see how behavior changed. Almost 60 percent of the participants single and 33 percent were married this helped identify the stage of life of the those in the sample. The other 7% represented those that were in domestic partnerships, divorced, or widowed. Finally, parental status was collected to see if behavior changed with the presence of children. Of the sample, over 19 percent of respondents were parents, while just over 80 percent had not yet become parents. Table 1: Detailed Demographics further depicts the diversity of demographics collected.

Table 1 Detailed sample demographics

Gender	Number of respondents	Percentage
Female	216	72.73%
Male	79	26.60%
Other	2	0.67%
Total	297	100.00%
Education level	**Number of respondents**	**Percentage**
Less than high school degree	0	0.00%
High school degree or equivalent	41	13.80%
Bachelor's degree	175	58.92%
Master's degree	49	16.50%
Doctorate degree	13	4.38%
Other (Associates)	19	6.40%
Total	297	100.00%

Table 1 Continued...

Household income	Number of respondents	Percentage
Below $20k	50	16.84%
$21k-$40k	43	14.48%
$41k-$60k	59	19.87%
$61k-$80k	51	17.17%
$81k-$100k	34	11.45%
Over $100k	60	20.20%
Total	297	100.00%
Employment	**Number of respondents**	**Percentage**
Full time	168	56.57%
Full time and student	11	3.70%
Full time and self-employed	2	0.67%
Part time	23	7.74%
Part time and student	21	7.07%
Part time, self-employed and student	1	0.34%
Unemployed but looking	4	1.35%
Unemployed but looking and student	1	0.34%
Unemployed and not looking	6	2.02%
Student	54	18.18%
Retired	1	0.34%
Self-employed	5	1.68%
Total	297	100.00%
Marital status	**Number of respondents**	**Percentage**
Single	176	59.26%
Married	98	33.00%
Domestic Partnership	16	5.39%
Divorced	6	2.02%
Widowed	1	0.34%
Total	297	100.00%
Parental status	**Number of respondents**	**Percentage**
Children	57	19.19%
No children	240	80.81%
Total	297	100.00%

Take-back program awareness

For this study, the first hypothesis was to identify the awareness millennial consumers in regard to retailers clothing take-back programs. With only 93 of the 293 participants indicating they had heard of take-back programs before, it was concluded that awareness was relatively low with only 31.65 percent of respondents being familiar with take-back programs.

To further investigate awareness, participants were asked to list three brands or retailers that currently offer these programs and cloud visualization was used to depict the results. (Figure 4: Consumer Brand/Retailer Awareness) Of the 93 that were aware of take-back programs, listing three brands or retailers led to a potential of 279 responses. However, only 162 responses were collected. When reading Figure 4, the larger the name, the more frequently the brand or retailer was mentioned. From the data collected, participants were able to identify 42 different companies that reportedly had take-back programs. It is important to note that not all brands and retailers listed followed the classification of take-back programs. Of the top 10 brands and retailers respondents most frequently listed, two were not brand or retailer take-back programs. Based on the data collected H&M was the retailer respondents were most aware of for their take-back program, followed by Patagonia, Madewell, North Face and N/A (or unable to identify). (Table 2: Top 10 Brand/Retailer Take-Back Programs) For the purpose of this study, the researcher is interpreting N/A as unaware of brands and retailers currently using take-back programs. It is significant that there was lack of understanding or identification of take-back programs by the respondents. After a description was given, many respondents still reported consignment stores and thrift stores such as Plato's Closet and Goodwill as take-back programs they were aware of. These results indicate there is a strong misunderstanding of the take-back programs and the distinction between different alternative clothing disposal methods. Results show that there is a lack of awareness between millennial consumers and take-back programs. This support the theory of planned behavior and that internal factors, such as awareness, affect perceived behavioral belief which then leads to the actual behavior.

Figure 4 Consumer brand/retailer awareness.

Table 2 Top 10 brand/retailer take-back programs

	Brand/retailer	Frequency
1	H&M	43
2	Patagonia	21
3	Madewell	20
4	North Face	11
5	N/A	11
6	Levi Strauss	7
7	American Eagle	6
8	Nike	5
9	Eileen Fischer	4
10	Plato's Closet	4

After take-back programs were explained to respondents, data was then collected to analyze if they would be willing to participate in these programs instead of using other disposable methods. The results from the survey revealed that 64.45 percent responded they strongly agree or somewhat agree. (Table 3: Consumer Willingness to Use Take-Back Programs) With over half of the participants responding within the top-two box, there is a significant opportunity for brands and retailers to incorporate take-back programs in current business models.

Table 3 Consumer willingness to use take-back programs

Are you willing to donate to a take-back program rather than using alternative means of disposal?		
	Frequency	**Percentage**
Strongly Agree	47	15.82%
Somewhat Agree	145	48.82%
Neither Agree nor Disagree	84	28.28%
Somewhat Disagree	15	5.05%
Strongly Disagree	6	2.02%
Total	297	100.00%

Trust in sustainability

To better depict the information gathered, a top-two box approach was used. This tool groups the two highest rating points of the survey and helps draw attention to the frequency and percentages of responses. For example, in this research, the top-two box was seen through phrases such as "strongly agree" and "somewhat agree", and "always" and "mostly". From the data collected, there is a lack of trust in the claims of sustainability with only 35.02 percent of the responses being in the top-two box. (Table 4: Consumer Trust in Brands and Retailers) With having almost 65 percent being skeptical of sustainability claims, brands and retailers have an opportunity to grow.

Table 4 Consumer trust in brands and retailers

Do you trust the sustainability claims of brands or retailers make about their products in general?		
	Frequency	**Percentage**
Always	6	2.02%
Mostly	98	33.00%
Sometimes	133	44.78%
Seldom	48	16.16%
Never	12	4.04%
Total	297	100.00%

Participants were then asked if they believed that the items returned in the take-back programs were being recycled or donated. Based on the information collected, only 35.35% of the respondents marking in the top-two box. (Table 5: Trust in Take-Back Programs) To help secure the success of take-back programs, brands and retailers have to work to build trust from consumers with where or how the donated item are being used.

Table 5 Trust in take-back programs

In general, do you believe brands or retailers are truthful in the claims that they are recycling or donating the products collected in take-back programs?		
	Frequency	**Percentage**
Always	8	2.69%
Mostly	97	32.66%
Sometimes	159	53.54%
Seldom	26	8.75%
Never	7	2.36%
Total	297	100.00%

To further investigate why respondents did not trust the sustainability claims that brands and retailers were making, participants were asked to briefly describe their beliefs. Of the 297 responses, 237 were N/A or left blank. For the purpose of this research, N/A is interpreted as unable to identify why they do not trust in the sustainability claims of brands and retailers. With the 60 remaining responses key words and phrases were used to evaluated trends in responses. Appendix D lists the method used. As seen in Figure 5, six categories were developed; profit, marketing, greenwashing, image, lack of transparency and research, other. The top three reasons participants were wary of the claims from brands and retailers were profit, other and marketing. Many responses indicated that they felt money was the driving force for sustainability initiatives rather than a goal to better company practices. The "other" category consisted of phrases such as "fast fashion can never be sustainable" and "exaggerated claims." This leads to the conclusion that participants had a cynical view of the fashion industry. Finally, the marketing responses indicated that participants believed that brands and retailers were using sustainability initiatives as a marketing tool to encourage more consumption through the use of buzzwords.
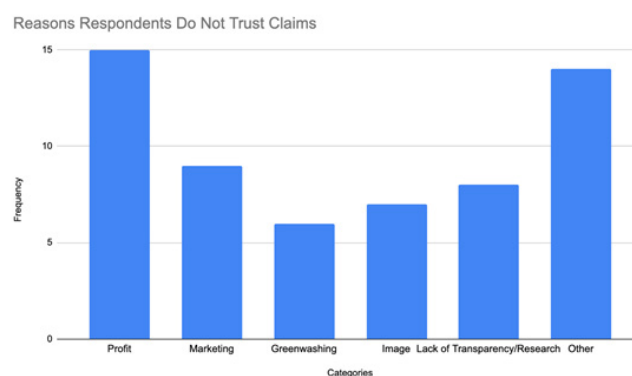
Figure 5 Reasons respondents do not trust sustainability claims.

Many respondents felt that the sustainability efforts were driven by the need to increase profit as compared to sincerity. When companies are incorporating sustainability initiatives throughout, it is important to ensure have clear communication of the motivations behind decisions. This ultimately supports the second hypothesis and that there is a lack of trust between millennial consumers and the sustainability claims of

brands and retailer. Using the theory of reasoned action, the lack of trust falls in line with behavioral beliefs, which then eventually affects the consumer behavior executed.

Brand loyalty

In determining if there is a correlation between brand loyalty and take-back program participation the responses indicate 58.59 percent of respondents would see an increase in loyalty (strongly agree or somewhat agree). Results showed that 56.90 percent of respondents did feel personal brand loyalty influenced participation in the brand's programs. (Table 6: Influence of Brand Loyalty).

Table 6 Influence of brand loyalty

	Would a take-back program increase your brand loyalty for the brands or retailers?		Does your personal brand loyalty make you more likely to participate in brand or retailer take-back programs?	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Strongly Agree	58	19.53%	45	15.15%
Somewhat Agree	116	39.06%	124	41.75%
Neither Agree nor Disagree	84	28.28%	79	26.60%
Somewhat Disagree	21	7.07%	30	10.10%
Strongly Disagree	18	6.06%	19	6.40%
Total	297	100.00%	297	100.00%

The fourth hypothesis claims that consumers are more likely to use take-back programs from brands they trust or have strong brand loyalty. From the data collected, there is a lack of trust in the claims of sustainability with only 35.02 percent of the responses being in the top-two box. (Table 4: Consumer Trust in Brands and Retailers) With having almost 65 percent being skeptical of sustainability claims, brands and retailers have an opportunity to grow. Both of these hypotheses are supported, indicating that brand loyalty does affect millennial participation in brand or retailer take-back programs. This is understood by using the theory of reasoned action and the affect behavioral beliefs have on the execution of consumer behavior.

Discussion and conclusion

Take-back programs are a unique way for brands and retailers to connect with consumers. These initiatives not only expand sustainability efforts and can improve corporate image, but also can bring shoppers back into the store and build the customer/brand relationship. Take-back programs are a fairly new business model that an increasing number of brands and retailers are integrating into their business models. The purpose of this research is to provide insight on consumer behavior surrounding alternative clothing disposal methods. As more sustainable models such as circular economies are becoming prevalent in the industry, it is important that brands and retailers' efforts are effective and useful. This research focuses on the relationship trust and brand loyalty have on millennial consumer participation with brand and retailer take-back programs.

Take-back programs are less common in the traditional retail landscape, and results of this study showed consumer awareness was low. This research found that almost 70 percent of the participants were unaware of take-back programs in general. In addition, when the respondents who were familiar with take back programs, but when asked to list brands and retailers that had their own initiatives, thrift stores, resale sites or N/A was often listed. However, when the respondents were asked if they would be willing to participate in a take-back program over 60 percent of the sample responded positively. This is an opportunity for brands and retailers to improve. By increasing awareness brands and retailers can increase consumer participation.

Finally, personal brand loyalty and trust were investigated as these are both influential elements in a traditional shopping atmosphere. The results indicated that loyalty, although not significant, did play some influence on willingness to participate in take-back programs. However, brands and retailers can use these initiatives as an opportunity to build that customer loyalty. In addition, it was discovered that customer trust with regard to sustainability claims was rather low. Respondents had little confidence in the sustainability claims that brands and retailers make as well as if the clothing brought in through take-back programs were actually being recycled or donated. Many explained that they felt companies were only being "sustainable" to gain more profit. Some comments include "they work for profit", "they care more about image and profit than sustainability", and "retailers do whatever they can to turn a profit." This highlights one of the biggest challenges that many brands and retailers face when integrating more sustainable practices in their business models. As more companies are developing take-back programs, marketers have to create a way to change the lack of trust in the consumer's mind.

This research provides key insights to the relationship between millennial consumer behavior and take-back programs. However, with any study there are some limitations, including sample size equal representation of all segments in the sample and the data. The sample size was limited both in number of respondents and effective representation of the target population. Another limitation of the study is the geographical location of the respondents. In addition, self-reporting bias was a limitation which may lead to bias.

There are many opportunities for future research related to the results of this study. First, a focus group of individuals with different backgrounds could be an opportunity to better understand the beliefs and values behind these behaviors. An exploratory study would help the research dissect the motivations behind certain behaviors and make better connections with certain demographics and their actions. In addition, this would eliminate self-reporting bias that occurs with self-reporting data. Another opportunity for future research, would be an observational study. Researchers could watch to see how many and what type of consumers are actually utilizing the take-back programs currently offered by retailers. This would be unique way to evaluate the consumers who are directly in touch with topic of this study. Additional interviews could be conducted with the individuals to collect data on the motivations behind the sustainable behavior. Information about how they were aware of these programs and why certain brands and retailers were chosen over others.

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Conflicts of interest

Author declares that there is no conflict of interest.

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