CONSCIOUS FASHION CONSUMERISM

PURPOSE:

- The current drift in the clothing industry is based on the fast cycle of contemporary fashion trends, which is termed as 'Fast Fashion'. This means to produce new consumer products at a lower price range that have a shortened lifecycle so that multi-national companies replenish their products at an increased pace and gain quick profits but sustainability is not in the framework.
- Therefore, this survey will profoundly examine the current consumer perception towards fast and sustainable fashion, and explore what would encourage responsible purchase behaviour of apparels.
- Such a survey would be helpful to gather insights about sustainable fashion, consumers' support for it, their willingness to embrace it and the competitiveness of sustainable fashion with fast fashion.
- It would enable us to understand their ideas about possible measures to revamp the clothing industry and the outreach to be generated to make individuals inclined towards eco-friendly alternatives.

TARGET POPULATION & SAMPLE SIZE:

Target Population chosen for our survey consists of individuals in the age range of 18 – 25 years residing in urban areas.
We would like to draw out a sample of 160 individuals for our survey.

RESEARCH OBJECTIVES:

- To discern the clothing purchase decisions of consumers and to deduce their fashion clothing consumption.
- To understand the perception of consumers towards fast fashion and to assess if they are aware about the social, medical and ecological ramifications of fast fashion.
- To adjudge consumer awareness, understanding and adoption of sustainable fashion and the obstacles faced in its adoption (if any).
- To identify alternatives for fast fashion that consumers would like to witness and adopt willingly.

CONFIDENTIALITY NOTE: This is a research project conducted by second-year students of Statistics from St. Xavier's College, Mumbai. The responses obtained from this survey will be used solely for academic purposes.

SAMPLING METHODOLOGY

For the purpose of this study, we selected a sample of 160 people, from our target population of individuals in the age group of 18-25 residing in tier 1 and tier 2 cities of India. We made use of non-probability sampling techniques, namely Convenience Sampling and Snowball Sampling. We made use of Google Forms to collect responses. The forms were sent to be filled via different social media platforms such as Facebook, WhatsApp, Instagram, LinkedIn, Reddit etc to our friends, family and acquaintances. The respondents were then asked to forward the form to other people who belong to the target population. Thus, we made use of Convenience Sampling and Snowball Sampling.

Our sampling unit is anyone who has filled the form. Our main parameters of interest for the analysis are the most preferred mode of shopping, purchase frequency of the respondents, factors influencing purchase decision, factors influencing mode of shopping, monthly income, expenditure of clothing, proportion of people aware about ramifications of fast fashion and proportion of people aware about sustainable fashion and proportion of people willing to adopt sustainable fashion over fast fashion considering the obstacles that may or may not entail with it.

Our survey included various qualitative as well as quantitative type of data which required different types of analysis (such as hypothetical chi-squared and Z- test , Spearman's Rank Correlation Coefficient and Karl Pearson's Correlation Coefficient) which would be best to draw the conclusions that we required. A certain amount of conceptual research as well as empirical research was required to analyse the data. A lot of the tests that were used on the sample required a certain amount of secondary data backing in order to draw certain conclusions for the population.

With reference to budget and time, there were no problems in carrying out the survey as it was carried out through online modality which helps in speeding up the work and the data becomes easier to analyse when it has been sorted into a spreadsheet database. All of the responses have been analysed through Microsoft Excel with required and relevant data tools.

PILOT SURVEY REPORT

Following the submission of the first draft, a pilot survey was conducted by all the group members among their trusted acquaintances. Overall, 35 individuals reviewed the questionnaire and subsequently the group received an amassment of constructive criticism which helped gain insight on what could be done to improve it. Based on the pilot survey following changes were made to the questionnaire:

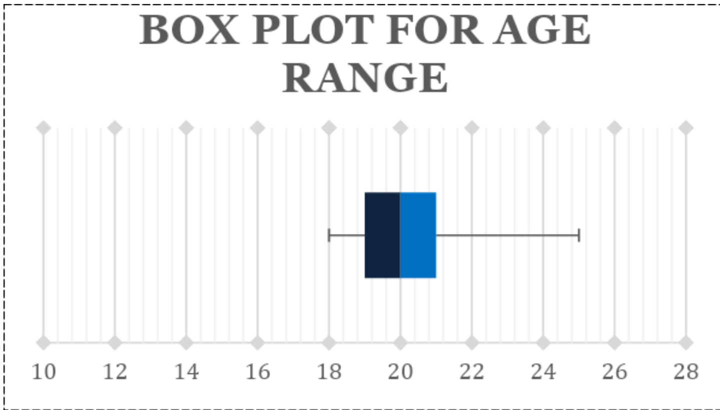
- The foremost remonstrance by the respondents was about the length of the questionnaire and that a little too many options were provided which seemed irrelevant. In order to aid this query and other similar ones, questions were re-formulated in a concise and self-explanatory manner, options provided were enhanced upon and redundant questions were removed.
- A brief note, if needed for description, was also added at the end of some questions so that the respondent is sure of his reply.
- The first question that asked the respondents about their brand preferences was modified and it then asked them to accord their most frequent mode of shopping so as to gain a more precise analysis.
- Respondents mentioned that the question which inquired about the key consideration factors which influenced their purchase decisions was confusing to them due to numerous factors provided to them to rank, thus it was categorically split into two to ease the burden of ranking ten elements. Some of the question formats were changed from multiple choice to a single choice options to obtain precise answers.
- Few respondents also seemed to think that not all questions should be deemed mandatory, therefore one, of the two open-ended questions, was discarded and other was made optional. The arrangement of questions was edited to ensure a logical flow to the sequence of questions.
- Although it wasn't mentioned in the feedback provided by the respondents, it was decided unanimously that a couple of questions which were reckoned to be leading were either discarded or reframed.
- Two additional questions were added that asked the respondents about their monthly income and monthly spending on clothing in order to find a co-relation between their monthly income and monthly expenditure on clothing, and to facilitate a better numerical and graphical analysis from the questionnaire.
- It was also realised that not all respondents may be aware of the concept of 'Fast Fashion', hence a brief note providing information about Fast Fashion was added prior to the main questionnaire. An important constituent of the questionnaire of adding a 'Thank You Note', missed by the group previously was added to the end of the questionnaire to express sheer humility.

In accordance to the feedback received from the respondents and after thorough discussion among the group members the issues raised were aptly addressed. Other necessary edits were also made to ensure that the final questionnaire did not have any discrepancies and deemed polished. A revised questionnaire was thus prepared inclusive of the required changes.

STATISTICAL ANALYSIS

In most developed nations, shopping has long since passed the role of necessity and has entered the realm of sport. Our fascination with shopping and consumption has produced many harmful effects on our lives (debt, stress, and busyness). And yet, it continues. Unfortunately, to a degree that only few of us even realize.

The statistical analysis from this survey would draw some important inferences that would shed light on the current consumer perception towards fast and sustainable fashion, and explore what would encourage responsible purchase behaviour of apparels. Such a survey would be helpful to gather insights about sustainable fashion, consumers' support for it, their willingness to embrace it. The survey collected 160 responses in the age group of 18-25 out of which 74 were males and 86 females. Most of the survey participants lied in the age range of 19 – 21 and it can be depicted by the following statistic plot.



The left side whisker represents the lowest 25% of the data, which implies the people of age group 18-19 represents the lowest 25% of the data.
The Box represents the interquartile range and approximately the middle 50% of the data which means that the people of age group 19-21 lie in the middle 50%. The right whisker represents the highest 25% (approximately) of the data, which implies the people of age group 21-25 represents the highest 25% of the data. People of age 25 are suspected outliers in the data. There are no outliers in the data. The data is skewed, since the right whisker is appreciably longer than the left whisker.

MOST PREFERRED MODE OF SHOPPING

FREQUENCY OF SHOPPIN	ONLINE	BRICK & MORTAR / OUTLET STORES	DEPARTMENTAL STORES	FASHION BOUTIQUES	SHOPPING STREETS	TOTAL
ONCE A WEEK	1	0	1	1	0	3
SEVERAL TIMES A MONTH	8	2	4	3	1	18
ONCE A MONTH	19	10	5	5	4	43
ONCE IN FEW MONTHS	29	9	16	3	5	62
ONLY IF REQUIRED	14	6	8	1	5	34

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TOTAL	71	27	34	13	15	160

One of the main objectives of this survey was to assess consumer purchase behaviour, therefore, the research group initially identifies the frequency of purchase and the most preferred mode of shopping among surveyed consumers. The obtained results have been enlisted in the above bivariate frequency distribution table and it is clearly observed that there is a staggering bias against high-end fashion boutiques. The second most unpopular mode in this study was identified to be shopping streets. The consumers mainly want to achieve a compromise between high price range – good quality and low-price range – substandard quality. The study also examines the purchase frequency of the surveyed consumers and the numbers are as illustrated below.

Purchase frequency is the average number of **purchases** made by a customer over a defined period of time. This study found that 39% of the surveyed consumers shopped once every few months and 21% of the them shopped only if required, hence their purchase frequency is pretty low and that they do not go overboard with shopping for clothes which is an initial step towards sustainability. Only 0.02% of surveyed consumers had a very high purchase frequency of shopping once a week.

The study also found that online shopping is the most preferred mode of shopping (44.4% of surveyed consumers prefer online shopping). Recently the number of people buying goods and services online has increased more than ever before.

In 2018, an estimated 1.8 billion people worldwide purchased goods online (Statista, 2018). In the same year, global e-retail sales amounted to $2.8 trillion.

Another survey reveals that 67% of Millennials and 56% of Gen Xers prefer to shop on online rather than in-store. (Conducted by Big Commerce). 63% of shopping occasions begin online according to a survey conducted by Thinkwithgoogle,

The reason for choosing online shopping could vary from convenience to competitive prices. This includes providing customers with detailed product descriptions and images. This includes advancements such as the 360 degree product views, and model size details for online clothing stores. This means that no matter where customers are finally making the purchase (online or in a brick-and-mortar store), their customer journey is starting online – in most cases on Google or Amazon, where they're doing their research.(Obleron, 2020).

Continuing with in-depth, the study proceeds to ascertain the relationship between Factors influencing respondent's clothing purchase decisions (Size, Price, Durability) and Factors influencing respondent's mode of shopping (Brand Reputation, Peer Influence). In order to quantify this relationship, we use Spearman's Rank Correlation Coefficient and Coefficient of Determination.

Bivariate Frequency Table for Factors influencing respondent's clothing purchase decisions

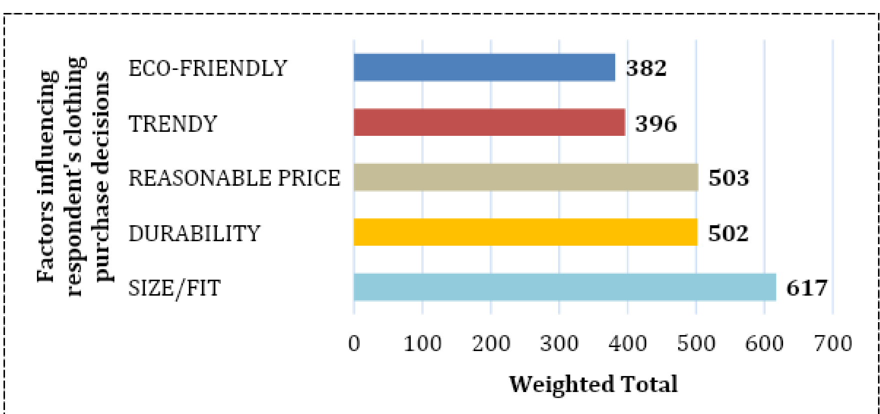
Where X_i: Factors influencing respondent's clothing purchase decisions

$W_i: Weights\ from\ 1\ to\ 5$

	Weights (W_i)					
X_i	1	2	3	4	5	Total
Size/Fit	19	15	18	26	82	160
Durability	12	30	53	54	11	160
Reasonable Price	14	33	51	40	22	160
Trendy	42	58	18	26	16	160
Eco-friendly	73	24	20	14	29	160
Total	160	160	160	160	160	

$$Weighted\ Total\ for\ X_i = X_iW_1 + X_iW_2 + X_iW_3 + X_iW_4 + X_iW_5$$

Factors influencing respondent's clothing purchase decisions	Weighted Total	Rank Assigned R_1
SIZE/FIT	617	1
DURABILITY	502	3
REASONABLE PRICE	503	2
TRENDY	396	4
ECO-FRIENDLY	382	5



Bivariate Frequency Table for Factors influencing respondent's mode of shopping

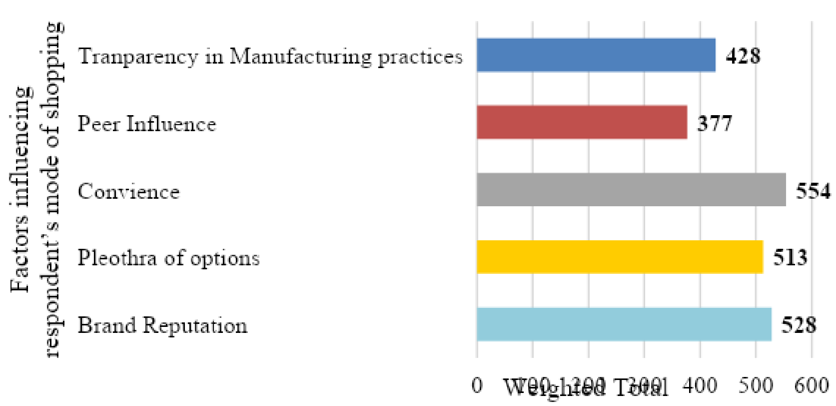
Y_i: Factors influencing respondent's mode of shopping

W_i: $Weights\ from\ 1\ to\ 5$

	Weights (W_i)					
Y_i	1	2	3	4	5	TOTAL
Brand Reputation	26	23	33	33	45	160
Plethora of Options	14	35	39	48	24	160
Convenience	14	19	47	39	41	160
Peer Influence	53	51	18	22	16	160
Transparency in Manufacturing Practices	53	32	23	18	34	160
TOTAL	160	160	160	160	160	

$$Weighted\ Total\ for\ Y_i = Y_iW_1 + Y_iW_2 + Y_iW_3 + Y_iW_4 + YW_5$$

Factors influencing respondent's mode of shopping	Weighted Total	Ranks Assigned R_2
Brand Reputation	528	2
Plethora of Options	513	3
Convenience	554	1
Peer Influence	377	5
Transparency in Manufacturing Practices	428	4



$$Spearman's\ rank\ correlation\ coefficient,\ denoted\ by\ r,\ is\ given\ by\ r = 1 - \frac{6\sum d^2}{n(n^2-1)}$$

$where\ R_1: ranks\ in\ first\ set$

$R_2: ranks\ in\ second\ set$

$d = R_1 - R_2$

$n = number\ of\ observations\ in\ each\ set$

Serial no.	X_i	R_1	Y_i	R_2	$d = R_1 - R_2$	d^2
1	Size/Fit	1	Brand Reputation	2	1	1
2	Durability	3	Plethora of Options	3	0	0
3	Reasonable Price	2	Convenience	1	-1	1
4	Trendy	4	Peer Influence	5	1	1
5	Eco-Friendly	5	Transparency in Manufacturing Practices	4	-1	1
			$\sum d^2 =$			4

$$\Rightarrow r = 1 - \frac{6\sum d^2}{n(n^2-1)}$$

$\Rightarrow r = 0.8$

$\Rightarrow$ There is a **strong direct correlation** between factors influencing respondent's clothing purchase decisions and factors influencing respondent's mode of shopping.

LINEAR REGRESSION LINE OF R2 ON R1

$x = R_1$	$y = R_2$	x^2	y^2	xy
1	2	1	4	2
3	3	9	9	9
2	1	4	1	2
4	5	16	25	20
5	4	25	16	20
$\sum x = 15$	$\sum y = 15$	$\sum x^2 = 55$	$\sum y^2 = 55$	$\sum xy = 53$

$$\Rightarrow \bar{x} = \frac{\sum x}{n} = 3, \bar{y} = \frac{\sum y}{n} = 3$$

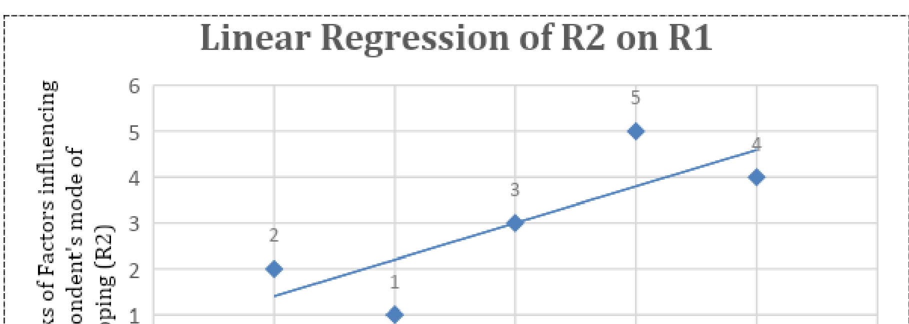
$$\Rightarrow \text{COV}(x, y) = \frac{\sum xy}{n} - \overline{xy} = 1.6$$

$$\Rightarrow \text{VAR}(x) = \frac{\sum x^2}{n} - \bar{x}^2 = 2$$

$$\Rightarrow b_{yx} = \frac{COV(x,y)}{VAR(x)} = 0.8$$

The linear regression equation y on x is:

$$y - \bar{y} = b_{yx}(x - \bar{x}) \Rightarrow y = 0.8x + 0.6$$



Coefficient of determination : $r^2 = 0.64$ which implies that 64% of variation in the

Ranks of Factors influencing respondent's mode of shopping is because of the variation in the Factors influencing respondent's clothing purchase decisions.
This relationship can be confirmed by various research studies conducted over the years, thus not implying causation. In the consumer market, consumers often use certain products to represent their identity or personality although those products may not have much functional or tangible quality (Kumar et al. 2009). Brand image helps consumers to process information about the product, to differentiate one product from the other, to provide reasons to purchase the product, to generate positive feelings from the product, and to form a basis for extended use of the product (Rajagopal, 2006). Further, Peer Influence is a sort of personal communication about a brand, product, or service. Although the sender of information has no commercial intention (Arndt 1967), the transmitted information may influence another individual to purchase a certain product or service (Harrison-Walker 2001; Hung and Li 2007). WOM has been considered as one of the most powerful forces in business as it plays a very influential role in consumers' decision making (Martin and Jacob 2010). Also, Price has been a common factor in influencing consumers' purchase decision-making and choice of products and services (Ryu and Han 2010). Customers may not purchase the product or services if the price is too expensive in comparison to that offered by other sellers.

The research group further went on to examine if there is a linear relationship between the Monthly Income and Clothing Expenditure, hence a linear regression model was formed on MS Excel. It was found that there is low correlation between Monthly Income and Expenditure, hence variability in Monthly Income does not necessarily imply variability in Expenditure on Clothing. This seems counter – intuitive, but it is not true. The relationship between income and expenditure is often called a consumption schedule. When there is more money or anticipation of income, more goods are purchased by consumers. Meaning money is spent on expenditures, at times, even if there isn't enough income to cover them. The difference between income and consumption is used to define the consumption schedule. When income grows, disposable income rises and thus consumers buy more goods. The result is an increase in the consumption of major purchases and non-essential goods. The increase in consumer expenditures is not a direct relationship to income. For every extra rupee earned, there may be a fraction spent on disposable income.

SUMMARY OUTPUT

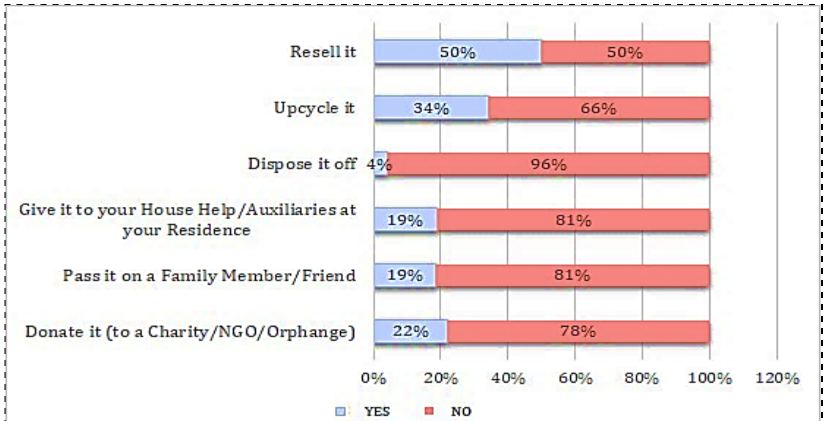
Regression Statistics	
Multiple R	0.355471195
R Square	0.126359771
Adjusted R Square	0.120830402
Standard Error	3767.730054
Observations	160

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	3.24E+08	3.24E+08	22.85248	3.9747E-06
Residual	158	2.24E+09	14195790		
Total	159	2.57E+09			

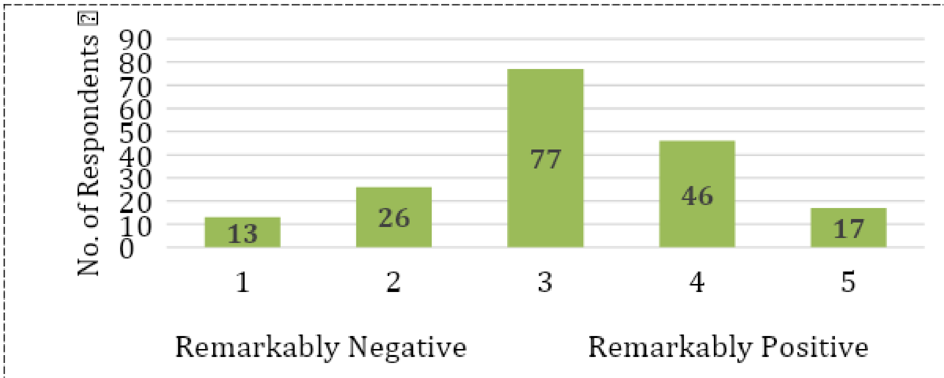
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	3057.065217	392.813	7.782495	8.72E-13	2281.223351	3832.907	2281.223	3832.907
Monthly Income	0.028804348	0.006025	4.780427	3.97E-06	0.016903477	0.040705	0.016903	0.040705

When asked about the attitude of people towards an unwanted item of clothing it was found that, out of 160 respondents, 63% of them give their unwanted pieces of clothing to the auxiliaries at their residence, 57% of them pass it on to a family member or friend and 48% of the respondents prefer to donate unwanted clothes. About 20% of the respondents upcycle their clothes, 3% opt to



resell while 15% of them prefer to dispose their clothes.
The graph depicts the willingness of people to purchase second-hand clothes based on their attitudes towards an unwanted item of clothing. As seen in the graph, people who resell and upcycle their clothes are most likely to wear second-hand garments.
Buying second-hand clothing helps lower the overall demand for new clothing to be produced. Choosing to wear used clothing means you are helping to recycle useful items that might otherwise end up discarded in landfills.
According to our survey 18% of the total respondents are willing to purchase/wear a used piece of clothing.

The study then discerns the attitude of people towards the negative impact of fast fashion with special emphasis to the environmental and social ramifications. It is astonishing to note that, a greater number of the surveyed respondents consider the concept of fast to be remarkably positive, while most of them hold neutral views on this topic. A hypothetical z-testing is thus done to determine if the respondents are aware about the serious social and ecological ramifications of fast fashion.



P : proportion of people who are aware of the ramifications of fast fashion

$p = 0.84375$ $\quad n = 160$ $\quad \alpha = 0.05$ $\quad Z_{tab} = 1.64$

$H_0: P \geq 0.75$ vs. $H_1: P < 0.75$

Test statistic: $Z_{cal} = \frac{p-P}{\sqrt{\frac{PQ}{n}}} = 2.73$

As $Z_{cal} > Z_{tab} = 1.64$, We reject H_0

$\therefore$ We accept H_1 at 5% L.O.S.

We can conclude that less than 75% of the respondents are unaware about the social and environmental ramifications of fast fashion.

When asked, if they were likely to continue shopping from their favourite brands if they were aware the adverse consequences it was found that 50 out of 160 were tremendously likely to stop purchasing if they were aware of the unlawful practices the brands engaged in while on the other end 9 out of 160 were still tremendously likely to continue purchasing goods from the brand. We used the χ^2 **test** (Chi-Squared Test) to determine whether there is a statistically significant difference between the expected frequencies and the observed frequencies.
Using the responses to one of our other questions, we expected 70 percent of the respondents to be tremendously unlikely or unlikely, 10 percent to be neutral and 20 percent to be tremendously likely or likely.

$$\chi_c^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Tabulating our actual values and expected values we get,

	Actual Value	Expected Value
Yes	99	112
No	28	16
Maybe	33	32
	160	160

Where Number of Yes Responses= Number of Tremendously Unlikely + Unlikely Responses
Number of Neutral Responses=Number of maybe Responses
Number of No Responses= Number of Tremendously Likely + Likely Responses
n = 160; Level of Significance = α = 0.01
O_i = Observed Value or Actual Value
E_i= Expected Value

H_0 : There is no significant difference between our expected values and actual values
H_1 : There is a significant difference between our expected values and actual values

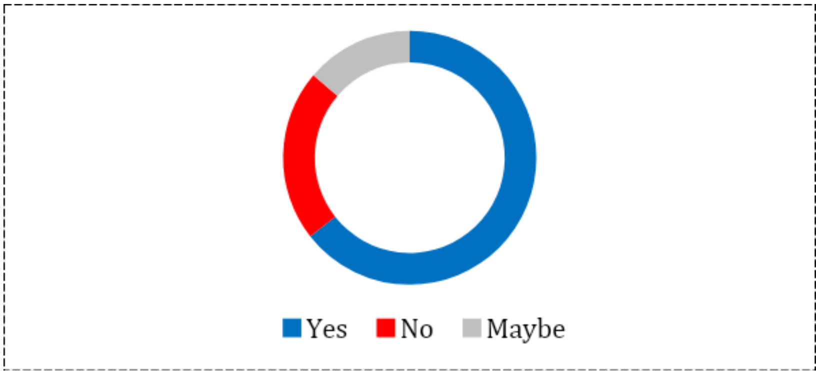
P value = 0.005143151
P value< 0.01

Therefore, we do not reject H_o at 0.01 level of significance and statistically conclude that there is no significant difference between our expected values and actual values. This implies that 70 percent of the sample would likely stop shopping from brands that engage in unlawful or unsustainable practices if they were aware of them whereas 10 percent of the sample would continue purchasing goods even if the brand engaged in unlawful or unsustainable practices.

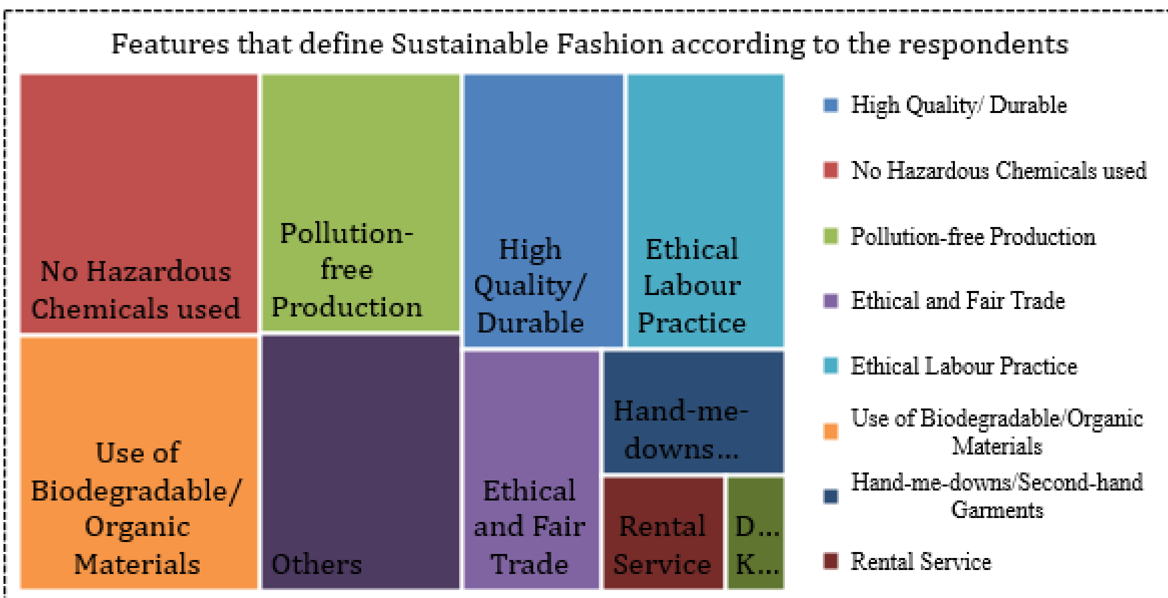
Through the survey, the research group also wanted to discover the awareness of sustainable fashion among the respondents and if they are willing to embrace given some of the obstacles that are entailed with it. Most of the respondent's claim that they are aware of Sustainable Fashion while rest of the respondent's don't know Sustainable Fashion or are not sure of the term.

Univariate Frequency Table

Option	Frequency	Percentage
Yes	103	64%
No	35	22%
Maybe	22	14%
Total	160	



In practice, Sustainable fashion implies continuous work to improve all stages of the product's life cycle, from design, raw material production, manufacturing, transport, storage, marketing and final sale, to use, reuse, repair, remake and recycling of the product and its components. From an environmental perspective, the aim should be to minimize any undesirable environmental effect of the product's life cycle by:
(a) ensuring efficient and careful use of natural resources
(b) selecting renewable energy sources (wind, solar, etc) at every stage, and
(c) maximizing repair, remake, reuse, and recycling of the product and its components.
From a socio-economic perspective, all stakeholders should work to improve present working conditions for workers on the field, in the factories, transportation chain, and stores, by aligning with good ethics, best practice and international codes of conduct. In addition, fashion companies should contribute to encourage more sustainable consumption patterns, caring and washing practices, and overall attitudes to fashion (Dr. Brismar, Green Strategy).The following illustration reveals the understanding of Sustainable Fashion of the respondents :

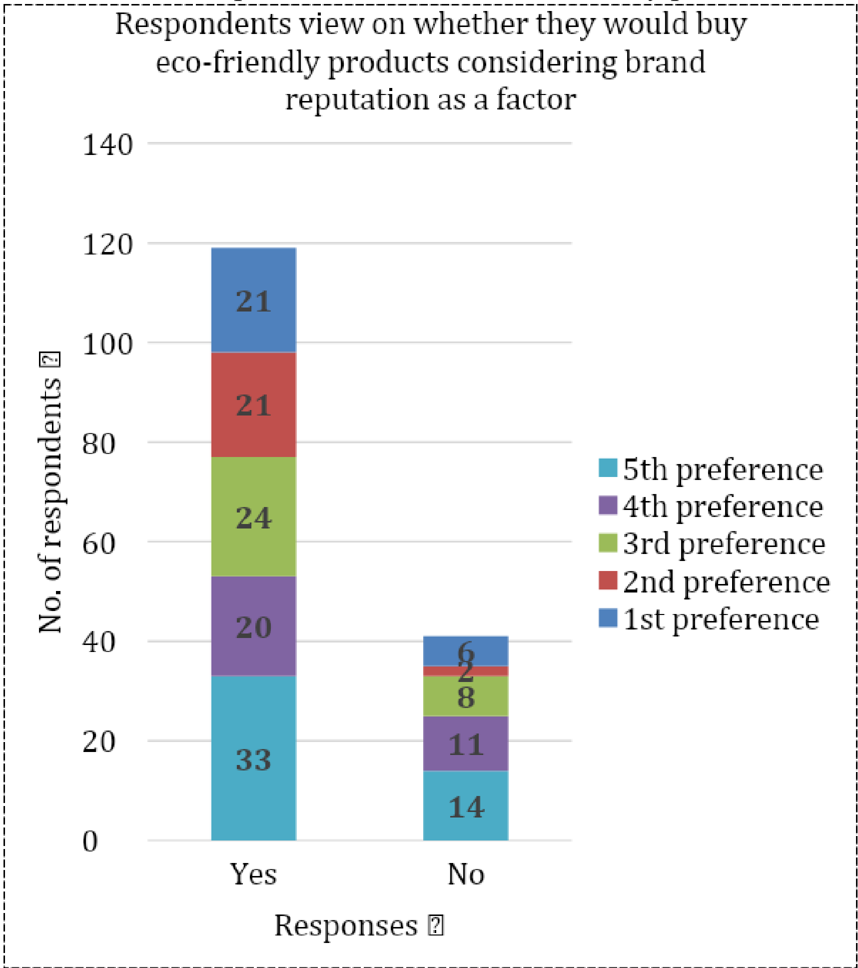


We see that for most (cumulatively, 63% of the total) of the surveyed customers Sustainable Fashion means no use of hazardous chemicals, use of biodegradable/organic materials and Pollution-free Production of garments while 2% are completely unsure of what Sustainable Fashion means.
It was also deduced that reasonable priced and good quality products would greatly encourage the customers to opt for sustainable fashion. A rather innovative concept that

came to light was that it would really helpful if the products carried the tag of a sustainability score (which determines how sustainable an apparel is in terms of %).

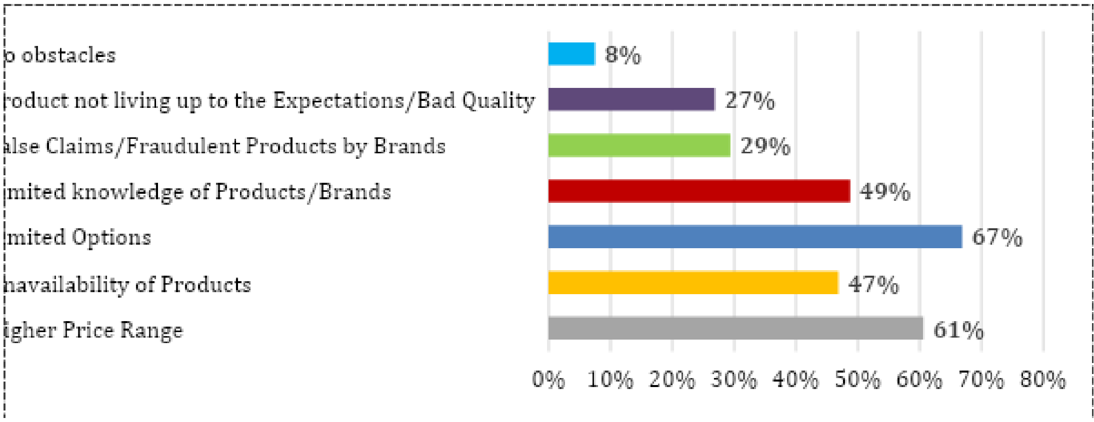
It was also found that most of the people would choose to buy new eco-friendly garments from their favourite store if it released a new eco-friendly fashion line-up. A lot of them would also consider the brand reputation and quality of the garments before buying so that they can get the best possible quality at a minimum cost because if they find the same product is being sold by another store for a better quality or price, then they may not choose that garment from their favourite stores.

Out of the 160 respondents, 119 of them would buy products from their favourite store if it sold a new line of sustainable, eco-friendly apparel and 41 wouldn't do it. One of the reasons why some of them would not buy the products as they fear costly which is been depicted later. Also, some of them would prefer to stick to their favourite fashion trends. Out of the 160 respondents, 27 of them give first preference to brand reputation while purchasing. Out of the 27 respondents who give first preference to brand reputation, 21 of them would choose to buy products from their favourite store if it sold a new line of sustainable, eco-friendly apparel.

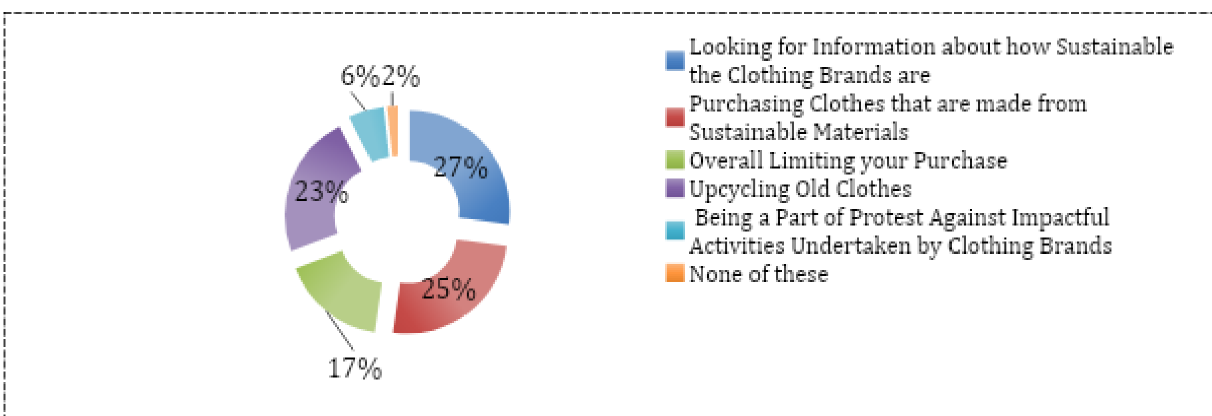


The response also wanted to ascertain how much more would the consumers be willing to invest in sustainable clothing and it was realised that 26.3% of the respondents would not willing to invest greater than 10% in sustainable apparel than in normal clothing while 22% and 19.4% were more liberal and invest 10 – 20 % & 20 – 30 % respectively more in sustainable apparels. A staggering 13% of the respondents also mentioned that they would not mind to even invest more than 50 %.

Sustainable fashion is growing in popularity but it is still a niche industry. The bar graph given below depicts the obstacles faced by consumers to buy sustainable clothing. According to our survey limited options, high prices and limited knowledge of sustainable fashion are the key challenges to sustainable clothing consumption.



Taken together interventions are needed at not only the level of individual consumers, but also at the social and cultural level and within the clothing industry. Although many claim that sustainable fashion can be had by all, realistically it can be prohibitively expensive. Another barrier is scepticism about retailers' sustainability claims, with consumers doubting both the veracity of these claims and the motives of those making them, some regarding them as 'just another way of selling us stuff'. Both academics and retailers highlight your trust in the retailer to have done all that for you [taken care of the ethics]' (Academic 2). Improving the transparency of the supply chain and earning consumers' trust are some ways of engaging effectively with consumers to address the barrier of complexity in sustainability and clothing supply. In order to overcome these challenges, companies and various players in the fashion industry have responded and many strategic initiatives have been taken toward sustainability. According to our survey conducted the respondents were aware of the initiatives taken by the such as FabIndia, H&M, Zara, Chola the Label, Doodlage, Ka-Sha and so on. Each company mentioned here, is not just using the term sustainability to leverage on marketing trends. Instead, there are thoughtful policies and practices that are invigorating change and resetting the big agenda, from innovative packaging, working with sustainable materials and fibres, to reducing waste, recycling industry leftovers, water management, vendor compliances and enabling technology. There are giant brands that become quickly visible through their campaigns and ability to join international platforms. However, some small, emerging fashion enterprises are also authentically trying to do their bit in this space.
The survey also assessed if consumers themselves would like to adopt some changes at grass root levels to embrace sustainability and the following results were obtained :



In order to avoid wastage/pollution most of the respondents considered enacting sustainable actions like looking for information regarding sustainability of various clothing brands and purchasing clothes that are made from sustainable materials.

The survey concluded with the respondents mentioning if they would like to witness some rational and impactful changes within the fashion industry and the following note – worthy suggestions were retrieved:

- A dedicated section in stores for eco-friendly products and a higher availability of thrift stores in India.
- A central body which could give a sustainability/green tag to products which are genuinely sustainable.
- Less use of “pure cotton” as it uses a lot of water in production and a better waste management system
- Reduction in the use of animal skin/fur and a better sharing of profits in an organization.
- Increase in awareness that fashion isn’t about wearing more or wearing expensive it’s about being yourself.

CONCLUSION

Clothing has never been more accessible and affordable than it is today. City slickers and suburban inhabitants alike don’t have to go far to acquire mass-produced garments from prominent, fast fashion companies. In a globalised world, the latest in high fashion trends are made available to the average, first-world consumer in a matter of weeks. But behind the glass screen, the trendy display cases, the cheap, chic clothing, is an industry that can’t be sustained in an ethical or environmental manner.
The purpose of this survey was to understand consumer behaviour and perception towards fast fashion and adjudge the willingness of consumers to embrace and adopt sustainable fashion. Following inferences have been drawn from our survey:

- While the most popular mode of shopping was online (44.4% in favour) due to its convenience, reasonable pricing and plethora of options, a staggering bias was observed against shopping from high-end fashion boutiques and shopping streets. The consumers mainly wanted to achieve a compromise between high price range – good quality and low-price range – substandard quality as examined.
- A relatively low purchase frequency was observed among the surveyed consumers as 39% of the surveyed consumers shopped once every few months and 21% of the them shopped only if required.
- With the calculation of Spearman’s Rank Correlation Coefficient and a linear regression model in place, a high positive correlation of 0.8 was found between factors influencing purchase decisions (Fit, Durability, Pricing) and factors influencing a person’s mode of shopping (Brand Reputation, Convenience, Peer Influence).
- A low positive correlation of 0.3 was found between Monthly Income and Expenditure on Clothing mainly due to the fact that increase in consumer expenditures is not in a direct relationship to income. For every extra rupee earned, there may be a fraction spent on disposable income (not inclusive of expenses on clothing).

- 63% of them give their unwanted pieces of clothing to the auxiliaries at their residence, 57% of them pass it on to a family member or friend and 48% of the respondents prefer to donate unwanted clothes. About 20% of the respondents upcycle their clothes, 3% opt to resell while 15% of them prefer to dispose their clothes, further implying through computation that people who resell and upcycle their clothes are most likely to wear second-hand garments out of the total 18% who would not mind wearing second hand clothing.
- Through a hypothetical Z-test at 5% level of significance, it was revealed that less than 75% of consumers were aware about the serious ecological and social ramifications of fast fashion. Further, after a chi-squared test at 1% level of significance, it was discovered that 70 percent of the sample would likely stop shopping from brands that engage in unlawful or unsustainable practices if they were aware of them whereas 10 percent of the sample would continue purchasing goods even if the brand engaged in unlawful or unsustainable practices.
- 64% of the surveyed consumers were completely sure about what sustainable fashion meant and cumulatively, according to 63% of consumers Sustainable Fashion was best defined as no use of hazardous chemicals, use of biodegradable/organic materials and Pollution-free Production of garments while a sad 2% of the sampling frame wasn't aware of the concept of Sustainable Fashion.
- 74% of the respondents mentioned that they would buy products from their favourite store if it sold a new line of sustainable, eco-friendly apparel. One of the reasons why some of them would not buy the products as they fear costly which is been depicted later. Also, some of them would prefer to stick to their favourite fashion trends. Cumulatively 68% of the respondents stated that they would not greater than 30% more in sustainable clothing than in normal clothing.
- While limited options, high prices and limited knowledge of sustainable fashion remained the key challenges in adoption of sustainable clothing, reasonable priced, good quality products, a dedicated section for sustainable clothing and a sustainability score for individual products were discerned as factors that would greatly encourage the customers to opt for sustainable fashion in addition to enacting sustainable actions at grass root levels to adopt sustainability overall.

To sum up it is important to mention that the fashion industry is one of the most polluting industries in the world. Consequently, labourers are underpaid and mistreated. This unsustainable industry will only continue to grow as long as consumers are ignorant or continue to turn a blind eye to the environmental and societal impact it leaves on the world. Awareness and acknowledgement of the problems that plague the environment due to garment production must increase in order to gain support from consumers in putting pressure on the suppliers. In the best interest of the planet and its inhabitants, the fashion industry is in need of a reformation, changes that are sustainable and ethical.

LIMITATIONS OF THIS STUDY AND RECOMMENDATIONS FOR FURTHER STUDIES

The present study provided several interesting insights. However, our results are also subject to certain research limitations and shall be tried and overcome for future studies.

- The concept of a standardized survey administered only through online modality certainly limited the participation of a relevant number of older generations. Although many studies related to fashion focus solely on young generation, it would be useful to conduct research that includes different ages in future studies. Future research should focus on increasing the respondent sample size using different means of communication, not only via social networking. To define this phenomenon in a wider way, considering also other parts of the population and from a geographical point of view, it will be possible to make some comparison with the concept of fashion industry and circular economy with samples from other states, paying attention to their representativeness. Moreover, the study only looked at the geographic segmentation (metropolitan cities), other segmentations such as ethnicity may also essential to be considered.

- The participants were asked to self-report their shopping experience which may not be accurate. For instance, the participants answered questions about the average frequency of shopping at fast fashion stores, and purchase frequency. Since the information was reported based on their memories and personal bias or prestige, there may be some inaccurate responses. An in-dept interview may be recommended for future studies.

- Since there is not a great deal of literature on slow fashion, it was unknown how much young adult consumers would understand about the subject, therefore questions testing the objective knowledge about slow fashion were worded in an obvious way. Future studies could take note of this study and create questions relating to measure objective knowledge in a different way.

- The questionnaire focused on the impacts of fast fashion and the benefits of purchasing slow fashion. The content of the module could be improved or changed to produce different results. Other factors could be added to examine their impact on attitude, subjective norm, and perceived behavioural control such as the consumer's past socially responsible related behaviour, moral values, fashion involvement, attitude towards fast fashion, and perceived quality of fast fashion. The measurement for objective knowledge could also be improved upon.

- As this study examines the respondent's behaviour at a specific moment in time, the specific sustainable activities of the companies were not considered. Therefore, future research linking marketing-related activities and consumer perceptions could also be meaningful as a comprehensive study on sustainable fashion in the future.

Form No: ____

This is a research project conducted by second-year students of Statistics from St. Xavier's College, Mumbai.

Your participation in this research study is voluntary. If you do wish to participate, your responses will be kept absolutely confidential and will solely be used for scholarly purposes.

Age (In completed years): ______

Gender: ◌ Male ◌ Female ◌ Prefer not to say ◌ Other: ______

Monthly Income (In ₹): ◌ 0– 50,000 ◌ 50,000 – 1,00,000 ◌ 1,00,000 – 1,50,000 ◌ 1,50,000 – 2,00,000 ◌ > 2,00,000

Q1. What is your average monthly clothing expenditure (in ₹)?

- ○ 0 – 5,000
- ○ 5,000 – 10,000
- ○ 10,000 – 15,000
- ○ 15,000 – 20,000
- ○ > 20,000

Q2. How often do you purchase new clothing?

- ○ Once a Week
- ○ Once a Month
- ○ Several Times a Month
- ○ Once every Few Months
- ○ Only if Required

Q3. What is your most frequent mode of shopping?

- ○ Shopping from Fashion Boutiques
- ○ Shopping from Brick and Mortar / Outlet Stores
- ○ Shopping from Departmental Stores
- ○ Street Shopping
- ○ Online Shopping
- ○ Other: ____

Q4. On a scale of 1-5, rank the key consideration factors that influence your clothing purchase decisions (1 – least preferred option, 5 – most preferred option).

	1	2	3	4	5
Size/Fit	○	○	○	○	○
Durability	○	○	○	○	○
	○	○	○	○	○
Reasonable Price Range	○	○	○	○	○
Trendy	○	○	○	○	○
Eco-friendly Concept	○	○	○	○	○

Q5. On a scale of 1-5, rank the key consideration factors that influence your mode of shopping (1 – least preferred option, 5 – most preferred option).

	1	2	3	4	5
Brand Reputation	○	○	○	○	○
Plethora of Options	○	○	○	○	○
Convenience	○	○	○	○	○
Peer Influence	○	○	○	○	○
Transparency in Manufacturing Practice	○	○	○	○	○

Q6. What do you do with an unwanted piece of clothing?

☐ Donate it (to a Charity/NGO/Orphanage)

☐ Pass it on to a family member/friend

☐ Give it to your house help/auxiliaries at your place of residence

- ☐ Dispose it off
- ☐ Upcycle it
- ☐ Resell it
- ☐ Other: ____

Q7. Would you consider purchasing or wearing a used piece of clothing?

- ○ Yes
- ○ No
- ○ Maybe

Q8. In your opinion, how positive or negative of a movement is fast fashion?

	1	2	3	4	5	
Remarkably Negative	○	○	○	○	○	Remarkably Positive

Q9. Are you aware of any of the following mentioned social and environmental ramifications of fast fashion?

- ☐ Forced child labour in developing countries
- ☐ Low wages for workers
- ☐ Health Hazards to workers (Respiratory Problems, Musculoskeletal Disorders, Hearing Loss, Lead Poisoning, Cancer, Irritative Dermatitis)
- ☐ Water and carbon footprint due to combustion of greenhouse gases, excess usage of water, and sewage pollution in clothing facilities
- ☐ Increase in plastic pollution that directly/indirectly affects marine life
- ☐ Fashion Waste ending up in Landfills
- ☐ Unaware of them

Q10. How likely would you be to continue purchasing from a brand that you currently buy from if it were to indulge in environmental pollution or unlawful practices?

	1	2	3	4	5	
Tremendously	○	○	○	○	○	Tremendously

Unlikely Likely

Q11. How effective would each of the following practices be at reducing the negative impact of the clothing industry?

	Absolutely Ineffective	Fairly Ineffective	Neither Effective nor Ineffective	Fairly Effective	Absolutely Effective
Pressure from consumers	○	○	○	○	○
Mainstream Media Iinfluence	○	○	○	○	○
Government regulations	○	○	○	○	○
Pressure from non-government organizations	○	○	○	○	○

Q12. Are you aware of the term, 'Sustainable Fashion'?

○ Yes

○ No

○ Maybe

Q13. Based on your understanding, what are the features that best define sustainable fashion?

- ☐ High Quality / Durable
- ☐ No hazardous chemicals used
- ☐ Pollution free in production
- ☐ Use of biodegradable/organic materials
- ☐ Ethical and fair trade
- ☐ Ethical Labour Practice
- ☐ Hand-me-downs / Second-hand Garments
- ☐ Rental Service
- ☐ Don't Know
- ☐ Other: ______________________

Q14. What are the factors that would encourage you to purchase sustainable items?

- ☐ Reasonable Price
- ☐ Quality of Product
- ☐ Materials used
- ☐ Eco-friendly Concept
- ☐ Transparency in manufacturing practice
- ☐ Signature tag/name of a worker attached to the product
- ☐ Sustainability Score (displaying how sustainable an item is, in terms of %)
- ☐ Don't Know
- ☐ Other: ______________________________________

Q15. How much more would you be willing to invest in sustainable items than normal items?

- ○ 0-10 percent more
- ○ 10-20 percent more
- ○ 20-30 percent more
- ○ 30-40 percent more
- ○ 40-50 percent more
- ○ > 50 percent more

Q16. If your favourite store sold a new line of sustainable, eco-friendly apparel, would you buy it?

- ○ Yes
- ○ No
- ○ Maybe

Q17. Are you aware of any of the following initiatives by multi-national clothing brands or standalone sustainable clothing brands?

- ☐ H&M Conscious
- ☐ Join Life by Zara
- ☐ Green stitched by Forever 21
- ☐ Fab India
- ☐ No Nasties
- ☐ Brown Boy
- ☐ Chola The Label
- ☐ Doodlage
- ☐ Ka – Sha India
- ☐ United by Blue
- ☐ Outliers Clothing Co.
- ☐ None of them
- ☐ Other: ____

Q18. What obstacles do you think you would face or are already facing to buy sustainable items?

- ☐ Higher Price Range
- ☐ Unavailability of Products
- ☐ Limited Options
- ☐ Lesser Options for Men
- ☐ Limited knowledge of products/brands
- ☐ False Claims / Fraudulent Products by brands
- ☐ Product not living up to the expectations / Not a good quality
- ☐ Other: ____

Q19. In order to avoid wastage/pollution, would you consider enacting some of the following sustainable actions?

- ☐ Looking for information about how sustainable the clothing brands are
- ☐ Overall limiting your purchase
- ☐ Upcycling old clothes
- ☐ None of these
- ☐ Purchasing clothes that are made from sustainable materials
- ☐ Being a part of protests against impactful activities undertaken by clothing brands
- ☐ Other: ____

Q20. What changes would you personally like to see within the fashion industry?

THANK YOU!

We are very appreciative of the time you have taken to assist in our analysis and extremely grateful to you for contributing your honest information and thoughtful suggestions.

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