

# **THESIS OF THE DOCTORAL (Ph.D.) DISSERTATION**

## **Exploring consumer decision making styles in online apparel consumption among Indian generation Y e-consumers**

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# CONTENTS

THESIS OF THE DOCTORAL (Ph.D.) DISSERTATION .....	1
BACKGROUND OF THE STUDY .....	1
Online shopping .....	3
Why is online shopping preferred? .....	4
Consumer Buying Behaviour .....	4
Consumer decision making process .....	5
Decision making styles .....	6
Statement of the problem .....	7
Research questions .....	8
Objectives .....	9
Hypotheses .....	9
Research design .....	10
DATABASE AND DESCRIPTION OF THE METHODS USED .....	12
Sample size .....	12
Data collection tool .....	12
Demographic profile of the respondents: .....	13
Factor Analysis .....	13
KMO and Bartlett's Test .....	14
Cluster Analysis .....	16
Classification of clusters towards e-consumer decision making styles .....	16
MAIN FINDINGS OF THE DISSERTATION .....	17
Website orientation .....	17
Hedonistic and incentive orientation .....	17
Societal and external/trust circumstances oriented .....	18

Novelty orientation.....	19
Impulsiveness oriented .....	19
Best value oriented: .....	20
Proposed e-consumer decision making styles of Indian generation Y e-consumers in the apparel segment .....	20
Cluster 1: Balanced e-consumer.....	22
Cluster 2: Entice e-consumer .....	22
Cluster 3: Hasty e-consumer .....	23
Cross tabs .....	24
Impact of residence of consumers on clusters .....	25
Summary of hypothesis testing .....	26
<b>NOVEL FINDINGS OF THE DISSERTATION .....</b>	<b>27</b>
Novel findings.....	27
<b>PRACTICAL APPLICABILITY OF THE RESULTS .....</b>	<b>28</b>
Value for researchers .....	28
Value for the marketers .....	28
Limitations .....	29
Recommendations .....	29
<b>PUBLICATIONS ON THE TOPIC OF THE DISSERTATION .....</b>	<b>35</b>
<b>OTHER PUBLICATIONS: .....</b>	<b>35</b>

## **LIST OF TABLES**

Table 1: Demographic profile of the respondents .....	13
Table 2: KMO and Bartlett's Test .....	14
Table 3: Rotated component matrix .....	14
Table 4: Classification of clusters towards e-consumer decision making styles .....	16
Table 5: Proposed e-consumer decision making styles of Indian generation Y e-consumers in the apparel segment.....	21
Table 6: Comprehensive details of the e-consumer segments .....	23
Table 7: Significance of demographic variables .....	24
Table 8: Impact of residence of consumers on clusters.....	25
Table 9: Chi-Square Tests.....	26
Table 10: Summary of hypothesis testing.....	26

## **BACKGROUND OF THE STUDY**

The era of globalization has brought humans closer and made lives faster. With the advancement in Information and Communications Technology (ICT) the distances have shrunk virtually and for the humans of the present time, everything and everyone is virtually close. Business is not an exception to ICT, it has made the business a lot better and easy in more than one way. Internet availability has made business deals more feasible from anywhere. One need not essentially meet to make business possible like it used to be in bygone years. The advancements in technologies have made marketers put up their business online and so has developed the idea of online stores. Ever since online stores has emerged the shopping has not been the same as it used to be. Online shopping as a phenomenon has changed the face of purchasing goods and services. Fast and busy lifestyle could be one among many reasons for this development among the consumer to choose online shopping while there are many other proven reasons like discounted price, convenience, and so on. The abundance availability of information from the sellers makes it much easier for a consumer to shop online, however, excess information availability has proven to be a problem and this issue is discussed further in the thesis. The phenomenon of online shopping can be simply defined as a consumer purchasing goods or services with the comfort of his or her choice from an online seller (who does not necessarily be the producer) through the Internet.

In India, online shopping is a relatively new but highly adapted field, however, for the companies to best target potential buyers, a deep understanding of consumer buying behaviour is necessary and this necessity has given rise to this research. An independent empirical study was conducted to wholly focusing on the modification of consumer-style inventory which was first framed by SPROLES and KENDALL (1986). Earlier researchers have suggested that the ease of comparability, convenience, handy and easy accessibility to information at cheaper rates like features of the Internet has made online shopping much preferable (BAKOS, 1997; JOHNSON et al. 2004). The convenience of hassle-free shopping is now attained due to the high Internet connectivity (4 billion Internet users across the globe according to Nielsen report (2018)) among the consumers, firms, marketers and executives. This connectivity and convenience together have proven a cut down in efforts for buying and selling of goods and services in terms of physical presence and presentation for the fact that online has substituted the physical aspect. The virtual connected lives are sophisticatedly more established than ever before and have flipped and boosted the way how consumers seek information and exchange ideas and opinions. This phenomenon has

not only changed the lives of consumers by simplifying their general life aspects but also has given a touch of a personalised ecosystem to them.

The Internet has enabled apparel retailers of all types and sizes to reach global consumers. As more consumers are shopping online, traditional apparel retailers and manufacturers have stepped into this information technology-based marketplace to compete with e-tailers who entered earlier, as they try to take advantage of this retail channel. In the meantime, with more retailers and manufacturers around the world moving into this new marketplace, the competition is becoming more intense and the need for intensive research of online apparel consumption rose. COWART and GOLDSMITH (2007), mentions that the apparel sector has distinct qualities, which have led retailers to become involved in the development of their own brands, target marketing and polarity in the marketplace (MOORE, 1995; MINTEL INTERNATIONAL GROUP, 2000). Thus, it is appropriate that the behaviour of apparel consumers be investigated separately from the online purchase of other merchandise. This measure has been used successfully to study apparel buying in other contexts (e.g. WANG et al., 2004), and so it seems to be a promising tool for understanding online apparel shopping.

Regarding the online apparel industry in India, various reports including BCG and Facebook reports foresee that digital will influence USD 30 billion of consumer spending on fashion online by 2020. The apparel segment shares 29% of the e-commerce business in India and 39% of Internet users of India are college students. Despite this huge number of Internet users being students very less attention has been paid towards students as consumers. Given the potential of this group of consumers, research is needed to better understand the decision making styles of students in online apparel consumption.

According to Mishra, surfacing the decision making styles of consumers in the field of consumer behaviour has always been an interesting area of research to scholars (MISHRA, 2010). An efficient marketing strategy could be developed when the consumer shopping behaviour is analysed and understood, though attaining this understanding of consumer shopping behaviour an in-depth understanding of decision-making styles is necessary as it is one of the major factors which influence the consumer purchase behaviour. Despite extensive research has been carried out around the globe in the context of consumer decision making styles, comparatively very less attention has been paid to whether the consumer decision making styles do apply to the young generation in particular who are now building impressive technical capabilities. SPROLES and KENDALL

(1986) suggested that decision-making styles are to be viewed as a relatively enduring consumer personality, analogous to the more general concept of personality in psychology.

Most of the previous research analysed online shopping in a wider sense; however, some of the researches have specifically studied online consumption in the apparel sector (GOLDSMITH and FLYNN, 2004, 2005). Due to the increasing economic advantage of online apparel in the total e-commerce transactions, marketers, market researchers and academicians are focused on identifying the predictors that are related to web-based apparel consumption. In the past, consumer shopping behaviour and their decision making styles in offline shopping environment has been studied significantly (BAKEWELL and MITCHELL, 2003; MITCHELL and WALSH, 2004; TAI, 2005), but these styles are not extensively researched in the online shopping scenario (COWART and GOLDSMITH, 2007; YANG and WU, 2006). The present study addresses this requirement by investigating online apparel consumption using the CSI, a basic shopping orientation related to consumer personality.

This study aims to examine the online consumer decision-making style that influences apparel shopping. The present research defines consumption as a total online transaction, which results in the purchase of items. This study explores various factors which influence a consumer's online purchase intention of apparel and so proposes a consumer-style inventory for young adults of India in the apparel sector in an effort to enrich the literature.

### **Online shopping**

The Internet with its invention has changed a lot of traditional ways of attaining things, in the same way, it has also changed the way people used to shop traditionally, the way marketers used to advertise traditionally and so on. "An increasing number and variety of firms and organizations are exploiting and creating business opportunities on the Internet" (LIAO and CHEUNG, 2001). Thanks to this invention, a consumer no longer has to schedule time and location to shop but could do it virtually around the clock from his/her convenient location. E-commerce is the act of buying or selling both goods and services over the Internet and is restricted only to transactions that occur over the Internet (BALTZAN and PHILLIPS, 2009). Internet users are multiplying day by day around the globe and this phenomenon of adapting to the Internet is giving rise to enormous growth potential to online sales (JOINES, SCHERER and SCHEUFELE, 2003).

According to GUPTA and NAYYAR (2011), consumer behaviour and consumption in national cultures are affected by the forces of globalization. The process of using the Internet to make a

purchase to satisfy one's need or wants could be called as online shopping. JOINES ET AL. (2003), mentioned that using of the Internet for online shopping has evolved as one of the primary reasons for Internet usage, combined with finding information regarding the product and searching the product itself.

### **Why is online shopping preferred?**

Many previous researchers have showcased their opinion that online shopping basically provides a different environment to the consumers as well as the marketers when compared to traditional shopping. Various researchers have proven that online shopping overcomes time and spatial barriers (VIJAYASASTRY AND JONES, 2000); provides easy comparison of products and prices (MONSUWÉ ET AL., 2004; LEE, 2013; GUPTA, SU, and WALTER, 2004; HAUBL and TRIFTS (2000)); is very convenient for its ease in shopping from anywhere and at any time (CHAING and DHOLAKIA, 2003, MONSUWÉ ET AL., 2004 and POULTER, 2014; CRISP, JARVENPAA and TODD, 1997; SHIM AND EASTLICK, 1998; KAU ET AL., 2003); allows customers to avoid long queues at the traditional shopping places (POULTER, 2014); offers opinions of other consumers (CHEN and CHANG, 2003). GREWAL ET AL (2002) suggest that online shopping is more efficient comparatively than traditional in-store shopping in meeting the consumers' needs and wants.

According to GHOTI (2016), to understand the reasons for a consumer to shop online it is necessary to take into consideration the situational factors. There are 4 situational factors that explain why a consumer opts for online shopping, they are:

1. Time limitation,
2. Immobility,
3. The geographical presence of the consumer,
4. Unavailability.

### **Consumer Buying Behaviour**

Consumer buying behaviour can be explained as the way an individual consumer behaves when she/he intends to make a purchase of a good or service on the bases of various external factors. LAMB ET AL. (2004) described consumer behaviour as a study of the process of decision making of a consumer while he/she intends to make a purchase and then consumes and dispose of the purchased product. Many previous researches suggest that consumer characteristics can be explained in 4 categories:

1. Personal

2. Social
3. Cultural
4. Psychological

Cultural characteristics further involve 3 subcategories which are culture, sub-culture and social class (HAWKINS, BEST and CONEY, 1995; KOTLER AND ARMSTRONG, 2003; PETER and DONNELLY, 2001, WU, 2003). Personal characteristics are divided into age, life-cycle stage, lifestyle, economic situation, occupation, personality and self-concept (ARMSTRONG and KOTLER, 2003; ADCOCK ET AL, 1995; HAWKINS and CONEY, 1995; WU, 2003). Social characteristics can be characterised as reference groups, family, social roles, and status (KOTLER AND ARMSTRONG, 2003; WU, 2003) while the last one i.e. psychological characteristics can be defined by motivation, perception, learning, and beliefs and attitudes (KOTLER AND ARMSTRONG, 2003; WU, 2003).

### **Consumer decision making process**

The consumer decision making process is a phenomenon that is common across all the consumers who make a purchase decision. Regardless of age, gender, financial status, education, every consumer must have to engage in the process of decision making. According to SCHIFFMAN and KANUK (2000), consumer decision making process is all about how a consumer spends their available time and money on personal and household products and services so as to satisfy their needs (SCHIFFMAN and KANUK, 2000). According to many authors (BOYD and WALKER, 1990; HOWARD, 1994; LAMB ET AL., 2004; LANCASTER and JOBBER, 1994; LEVY and WEITZ, 1992; SCHIFFMAN and KANUK, 2000; MITTAL and SHETH, 2004; SOLOMON ET AL., 2002), there are 3 types of consumer decision making processes, they are:

1. Routine decision making process
2. Limited decision making process
3. Extensive decision making process

According to SOLOMON (2010), the level of consumer involvement is the determining factor in categorising purchase decisions. The investment of resources like time, money and physical efforts in the process of searching, evaluating and deciding suggests the involvement of a consumer in the purchase process.

## **Decision making styles**

Until now many researchers investigated the study of consumer decision-making styles and understood the importance of consumer decision making styles in researching consumer behaviour (HAFSTROM, CHAE, and CHANG, 1992; DURVASULA ET AL., 1993; LYSONSKI, DURVASULA, and ZOTOS, 1996; MITCHELL and BATES, 1998; FAN and XIAO, 1998; KAMARUDDIN and MOKHLIS, 2003; BAKEWELL and MITCHELL, 2003; MITCHELL and WALSH, 2004; BAUER ET AL., 2006). MITCHELL and BATES (1998) pointed out that the researchers have put efforts to understand the individual consumer decision making styles because of the inextricable links to consumer's purchase behaviour. According to TAI (2005), the examination of decision-making styles is important so that marketers and retailers are in a better position to understand the preferences and needs of different groups of consumers.

In order to conceptualize consumer decision making styles, SPROLES and KENDALL (1986) have developed a framework called the Consumer Style Inventory (CSI) which was an 8-factor model that empirically measured these decision-making styles. DONAL ROGAN ET AL. (2007) has explained the relationship between marketing strategy and consumer behaviour. He stated that the strategy is about the increase in probability and frequency of buyer behaviour: Requirements for succeeding in doing this are knowing the customer and understand the consumer's needs and wants.

The existing literature suggests that the decision making styles of consumers could be majorly of three approaches which are: Consumer Characteristic Approach (SPROLES and KENDALL, 1986; SPROLES and SPROLES, 1990); Psychographics/Lifestyle Approach (LASTOVICKA, 1982; WELLS, 1975) and Consumer Typology Approach (DARDEN and ASHTON, 1974; MOSCHIS, 1976). The Characteristic Approach focuses on cognitive and affective orientations which are related to the decision-making of consumer, while the Psychographics/Lifestyle Approach suggests, while predicting consumer behaviour and assessing consumer personalities it is effective to have consumer's interest, activity and opinion statements. Finally, Consumer Typology focuses on identifying general consumer "types" which differ from each other. According to PARK (2007), Consumer Characteristic Approach was identified as the most explanatory and powerful approach among the three types of approaches as it focuses on the mental orientation of consumers in making decisions.

SPROLES and KENDALL (1986) employed Consumer Characteristics Approach to develop the consumers' decision-making styles list which is otherwise known as Consumer Style Inventory

(CSI). According to SPROLES and KENDALL (1986), the identification of 8 factors of CSI was done based on a selection method containing certain criteria:

1. The method should contain mental consumer characteristics that directly link to consumer choices,
2. The method should contain independent and complete decision-making characteristics,
3. The method should rate and measure each consumer on all characteristics in order to profile the consumer into different styles,
4. The method should be of importance for consumer-interest professionals.

Based on the above-mentioned criteria the CSI was developed with an assumption that consumer decision-making behaviour could be explained by 8 decision-making styles/8 dimensions. So derived 8 CSI dimensions/factors are: (1) Perfectionism and High-Quality Consciousness; (2) Brand Consciousness; (3) Novelty-Fashion Consciousness; (4) Recreational, Hedonistic Shopping Consciousness; (5) Price and “Value for Money” Shopping Consciousness; (6) Impulsiveness; (7) Confusion from Over Choice; (8) Habitual, Brand-Loyal Orientation toward Consumption.

Though there are arguably a few issues in validating of CSI in some cases, it has been identified as the tested instrument and widely employed framework for measuring decision-making styles of consumers since its development in 1986 (CANABAL, 2002; LYSONSKI ET AL., 1996; MISHRA, 2010; FAN and XAIO, 1998; HIU ET AL., 2001; BAKEWELL and MITCHELL, 2003, 2004,2006; BAUER ET AL., 2006; MITCHELL and BATES, 1998; LENG and BOTELHO, 2010; LYSONSKI ET AL., 1996; BAUER ET AL., 2006; WALSH ET AL. 2001; LYSONSKI ET AL., 1996; MOKHLIS, 2009; OMAR ET AL. , 2009; HANZAEI and AGHASIBEIG, 2008; HAFSTROM, CHAE and CHUNG, 1992; LYSONSKI ET AL.,1996; LENG and BOTELHO, 2010). It is also apparently the pioneer systematic attempt to create a robust methodology for measuring shopping orientations and behaviour (HAFSTROM ET AL., 1992; LYSONSKI ET AL., 1996; MITCHELL and BATES, 1998; WICKLIFFE, 2004).

### **Statement of the problem**

A large chunk of goods-producing companies and service-providing organizations are expressing their opportunistic view towards the trend of online shopping. Many upsides of e-retailing are attracting both marketers and consumers towards diverting them from traditional marketing methods to online markets. As for a marketer, the tremendous efficiency online market space provides to reach their potential consumers is widely appreciated while an impressive and convenient way to shop online makes consumers to not look back towards offline shopping. Ever

since the evolution of online marketing has taken place researchers have always shown interest in obtaining more knowledge of how a consumer behaves in the online shopping environment.

Many researches have been carried out in the field of consumer behaviour in various fields but the e-consumer behaviour or consumer behaviour in the context of online shopping is comparatively less exploited. Besides many dimensions of e-consumer behaviour among various sectors of e-commerce, the online apparel sector is comparatively much less explored. E-consumer behaviour is still being researched from different perspectives by different researchers and is yet to reach its complete understanding levels. Researchers have until now come up with various convincing and widely accepted factors based on traditional consumer behaviour models.

In this era of globalisation, India as a developing nation is outstanding in the segment of the online market besides many others. The importance of studying the consumer behaviour of developing countries to develop efficient marketing strategies is becoming increasingly important over time and as the online marketing segment is increasing. The idea of e-consumer buying behaviour is not yet properly addressed in regards to India and this created a need to understand the main orientations which a consumer possesses while deciding on apparel buying via the Internet.

Online markets are experiencing a huge acceptance and a lot of consumers are getting involved in it than ever before. Many factors including the fast lifestyle, improved disposable income, convenience, savings and discounts are favouring the online purchase intentions of generation Y consumers. In India, online shopping is well-practised but is still to reach its potential. The studies addressing Indian e-consumer behaviour are comparatively very less and there is a sheer need to get more insight on India e-consumer behaviour as understanding consumer behaviour is prominent to make appropriate marketing strategies to target the consumers. On this line, this research addresses the factors which influence online apparel consumption in India among young adults of Generation Y using the concept of consumer style inventory which was first proposed by SPROLLES and KEDALL (1986) in which there was 8 consumer decision making styles.

### **Research questions**

Though there has been a lot of research done to date to understand decision-making styles in various contexts including online shopping, this research is conducted on the bases of three questions which are identified during an extensive literature review. The three questions are as followed

1. Are the decision making styles of consumer-style inventory given by SPROLES and KENDALL in 1986 applicable for Indian university going students in online apparel consumption?
2. Is consumer style inventory needs to be updated with new decision-making styles according to Indian students when it comes to online apparel consumption?
3. Can segmentation of e-consumers be done on the bases of consumer's decision making styles?

## **Objectives**

The main objective of this study is to update the consumer style inventory by exploring new types of decision-making styles which better suit current consumer needs and preferences. Complementing the main objective of the study, a few more objectives which are listed below were also designed to attain the overall goal of designing a new consumer style inventory, they are:

1. To check if the website offering has a significant impact on online apparel shopping intention.
2. To check if hedonism and incentives have a significant impact on online apparel shopping intention.
3. To check if societal and external circumstances have a significant impact on online apparel shopping intention.
4. To check if the novelty has a significant impact on online apparel shopping intention.
5. To check if impulsiveness has a significant impact on online apparel shopping intention.
6. To check if the best value orientation has a significant impact on online apparel shopping intention.
7. To segment e-consumers according to their online apparel purchase orientations.
8. To examine if demographic factors influence the consumer decision making styles and if there are differences among clusters pertaining to the demographic factors.

## **Hypotheses**

To study the consumer decision making styles in online apparel consumption of Indian generation Y consumers, various variables were studied and the following 6 hypotheses were primarily formed.

H1: Generation Y e-consumers of India are website oriented.

H2: Generation Y e-consumers of India are hedonistic and incentives oriented.

H3: Generation Y e-consumers of India are societal and external influences oriented.

H4: Generation Y e-consumers of India are novelty oriented.

H5: Generation Y e-consumers of India are confused and impulsive.

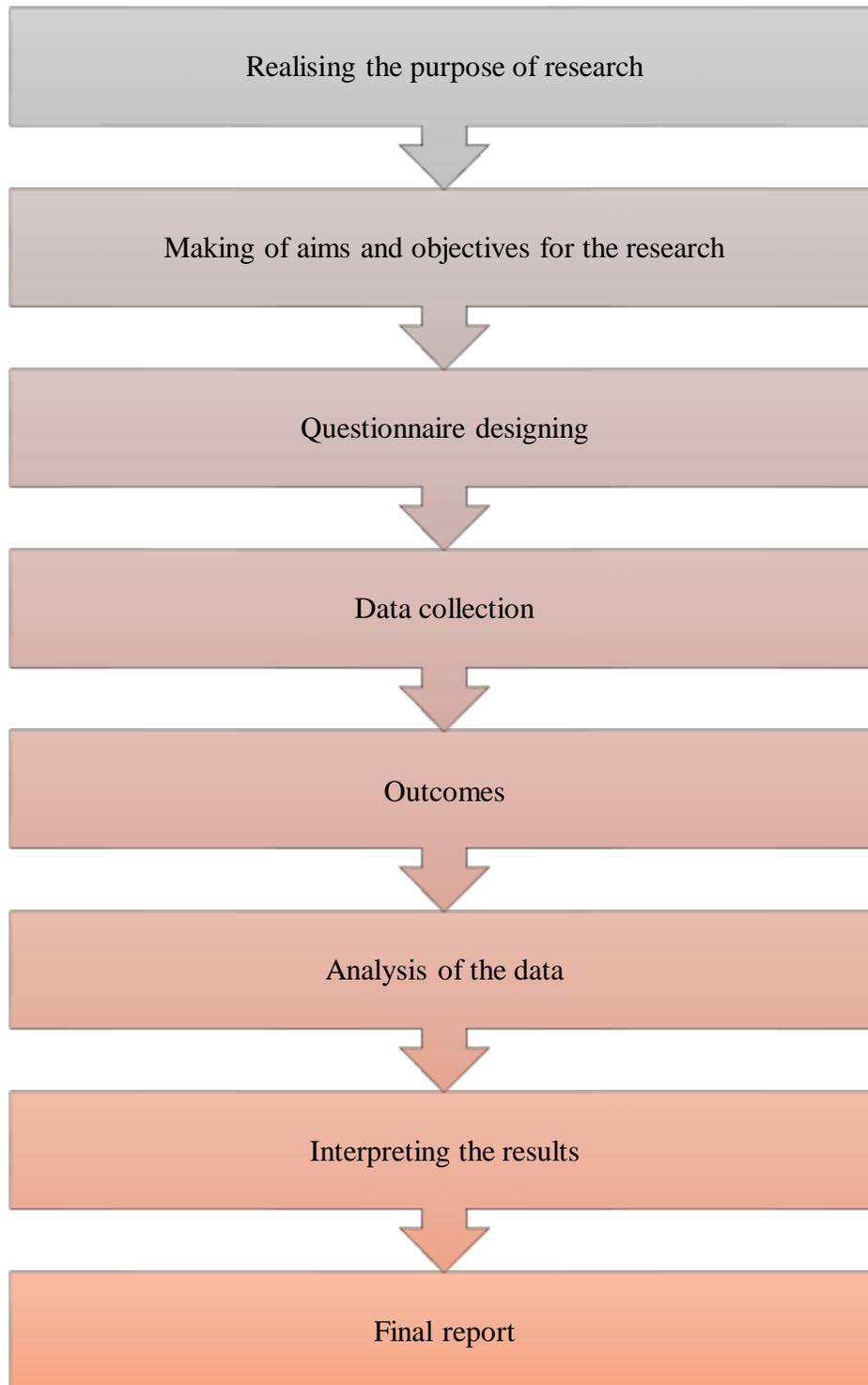
H6: Generation Y e-consumers of India are best-value oriented.

H7: Demographic variables affect consumer segments.

## **Research design**

The research design for the present thesis was made in order to attain a smooth flow of the research and to attain efficient results which could answer the research questions. Firstly, the purpose of the research was realised which was done through a thorough literature review in the area of consumer decision making styles. A lot of referred articles, published papers, theories, theses etc. were analysed to find the gaps in the existing work and a major gap of not having enough information and research regarding Indian youngster's online purchasing styles in the context of apparel (which is the second valuable sector in online shopping industry) was found and the importance of research in this area was realised by the researcher. Following the identification of the purpose of the research the aim was set which is to make a consumer style inventory similar to that of SPROLES and KENDALL (1986) to address the decision making styles of generation Y Indian online shoppers while purchasing apparels online, objectives of the research and hypothesis were formed by the research. The third step was to design a questionnaire and it was done on the bases of an adapted questionnaire form COWERT and GOLDSMITH (2007) with the author's consent. The adapted questionnaire was then modified according to the demands of the present thesis.

The fourth step was the actual collection of data using the modified final questionnaire. Data of 335 respondents were collected, the details of which are presented in this chapter. As the fifth step, the data collected were entered into the SPSS programme and various analyses were performed on the data to derive the results to answer the research questions and reach research objectives. The results were interpreted and explained and finally, the report was jotted down to explain the results which made the final thesis report possible and conclusions were presented accordingly. A flow chart of the research design is shown in Figure 1 below.



**Figure 1: Research design followed**

*Source: Designed by the author*

## **DATABASE AND DESCRIPTION OF THE METHODS USED**

### **Sample size**

The sample size determination is a crucial phenomenon. Deciding on appropriate sample size is very important while keeping in mind the price in terms of monetary and time is imperative. LIND ET AL. (2012), suggest that the sample size is crucial for the reason that if the size is too big the additional expenses incurred are high and if the size is too small the results will be inaccurate and so will be the conclusions. GUADAGNOLI and VELICER (1988) cited enough researches (COMREY, 1973, 1978, GORSUCH, 1983, GUILFORD, 1954, HAIR ET AL. 1979, LINDEMAN ET AL. 1980, LOO, 1983) to prove that 100 to 200 observations are sufficient for research. Anywhere between 100 and 300 responses have been suggested by GUADAGNOLI and VELICER (1988). SAUNDERS ET AL. (2003) suggest that a compromise be made between the accuracy of the results and the price in terms of money and time spent collecting, checking and analysing the data. A total of 335 responses were collected after filtering out for this research work.

### **Data collection tool**

According to GRAY (2004), surveys are commonly accepted methodologies that are used by the researchers for the collection of information which is used for describing, comparing and explaining the behaviours and events. A questionnaire was used as the data collection tool in this research work. GODDARD and MELVILLE (2005), explains that a questionnaire is a list of questions given by the researcher to the target group to be answered. A questionnaire is a research tool that is asked to fill by the potential respondents in which the same set of questions in the exact same order are spread throughout the sample (GRAY, 2004). The questionnaire was designed and spread using a non-probability technique which is the snowball method as discussed in section 3.3. In the month of November 2019. It took nearly 1 month for the data of 335 respondents to be collected.

GAMMIE, 2011 cited GILLHAM ET AL. (2000) and GRAY (2004) works to list out the advantages of a questionnaire, they are;

1. Less time and money required.
2. Fast inflow of data from a versatile group.
3. Convenience of the respondent.
4. Coding the responses is quick due to the close-ended questions.

5. Respondent's anonymity can be secured easily.

An electronic questionnaire was used in this study as per the belief of the researcher that most if not all of the target respondents are well aware of the easy usage of the electronic medium as the target group was generation Y e-consumers.

### **Demographic profile of the respondents:**

The table below shows the demographic profile of the respondents.

**Table 1: Demographic profile of the respondents**

Gender		
Female	151	45.1
Male	184	54.9
Location		
urban	237	70.7
suburban	61	18.2
rural	37	11.0
Education		
Bachelors	208	62.1
Masters	127	37.9
Income		
less than 1000	84	25.1
1001-2000	86	25.7
2001-3000	79	23.6
3001-4000	33	9.9
more than 4000	53	15.8

### **Factor Analysis**

Factor analysis is used in the present research work to reduce various variables into factors and those factors are considered as e-consumer decision making styles while online apparel consumption. The outputs of factor analysis are shown forth.

## KMO and Bartlett's Test

Kaiser-Meyer-Olkin (KMO) measure is an index of sampling adequacy which determines the appropriateness of the factor analysis. According to Kaiser (1974), the minimum acceptable value for KMO is 0.5 while if the value is between 0.5 and 0.7, it is acceptable. If the value of KMO is between 0.7 and 0.8 it is a good value, between 0.8 and 0.9 is great and if the value is more than 0.9 then it is excellent. The KMO value in this study is 0.911 which is apparently an excellent measure and this indicates that factor analysis could be considered as an appropriate technique to analyse this data.

Bartlett's Test of Sphericity is a test statistic to examine the hypothesis that variables are uncorrelated in the population. The factors must correlate for appropriate factor analysis. At the level of 0.05 and above the null hypothesis is considered significant. In this study, the significance level is .000. Table 2 shows KMO and Bartlett's test results and table 3 shows the rotated component matrix.

**Table 2: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.911
Bartlett's Test of Sphericity	Approx. Chi-Square	6848.628
	df	595
	Sig.	.000

*Source: Calculated by the author*

**Table 3: Rotated component matrix**

	Component					
	1	2	3	4	5	6
Good quality is important	.841					
On time delivery is important	.818					
Prompt after sales service	.759					
I trust review facts than sellers	.749					
Very best	.732					
Well-known brands	.725					
Reviews	.707					
User friendly website design	.691					

Less reviews	.667					
Loyal to certain brands	.563					
I find apparel brand I like and stick to it	.516					
Fun to buy clothes online		.715				
Enjoyable activity		.693				
Online shopping is pleasant activity		.688				
E-coupons and cashbacks encourages me to shop online		.612				
E-coupons and cashbacks unwanted shopping		.594				
Discounts tempts me		.555				
Lower priced brands		.460				
Buying online saves money		.460				
Buy because most of my friends do so			.698			
No easy physical access			.686			
Others like my purchase			.669			
Online brands are not fake			.616			
I trust online sellers sell authentic brands			.521			
Cheap Internet availability			.444			
Wardrobe up to date				.760		
More expensive				.721		
Brand I buy over and over				.452		
Care less purchase decisions					.743	
Hard to choose which store to shop from					.619	
Spontaneous decisions					.580	
Confused					.541	
Sale price						.571
I should buy more carefully						.553
Latest style						.474
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 23 iterations.						

## Cluster Analysis

### Classification of clusters towards e-consumer decision making styles

According to the factor analysis results from the previous analysis, we have observed that there are 6 factors that represent the styles of e-consumer decision making phenomenon. The extracted 6 factors or in this case the e-consumer decision making styles are:

1. Website orientation
2. Hedonistic and incentives oriented
3. Societal and external circumstances oriented
4. Novelty orientated
5. Impulsive
6. Price and style balance oriented

The K-means cluster analysis was applied to the 6 factors to classify the clusters in which respondents fall and to name the kind of e-consumers. The final clusters from the result of cluster analysis are shown in table 4 below.

**Table 4: Classification of clusters towards e-consumer decision making styles**

	Cluster		
	1	2	3
Website oriented	-.08460	.11438	.01597
Hedonistic and incentives oriented	-.16236	.84034	-.76092
Societal and external circumstances	.76301	-.48501	-.84088
Novelty orientation	.02278	.24715	-.35868
Impulsive behaviour	.04237	-.35590	.37274
Best value oriented	.16274	.06218	-.39053

## **MAIN FINDINGS OF THE DISSERTATION**

### **Website orientation**

Website orientation was found to be the first factor that influences generation Y consumers while shopping online. This factor explains the orientation of consumers towards the website offering and attributes as a consumer decision making style among generation Y consumers while online apparel purchase. This factor consists of 11 components which are good quality is important; on time delivery is important; prompt after sales service is important; I trust review facts than sellers; very best quality is important; well-known brands are available; availability of reviews; user friendly website design; I prefer not to buy if there are less reviews; I am loyal to certain brands; I find apparel brand I like and stick to it. The highest loading was for 'good quality is important' which implies that this component is the most important issue in regarding to what a website can offer for a generation Y e-consumer while shopping for apparels online. The loadings range from 0.842 to 0.517. Table 29 shows the means, standard deviation and factor loadings of the variables. The website core qualities like offering good quality, providing on time delivery and prompt after sales service are found to be the topmost components according to their factor loading. Other variables like reviews, ease of using the website were explained in this factor.

To test the reliability of this factor Cronbach's alpha was calculated and the Cronbach's alpha value was .922 which means that the scale reliability is high and the correlation coefficient is high. The Cronbach's alpha value indicates that the relationship between the variables is quite high and is not affected by random factors.

### **Hedonistic and incentive orientation**

Hedonistic and incentive orientation was found to be the second factor that influences generation Y consumers while shopping online. This factor explains the orientation of consumers towards the happiness of online apparel consumption and incentives offered by the online seller as a consumer decision making style among generation Y consumers while online apparel purchase. This factor consists of 8 components which are fun to buy clothes online; online apparel shopping is an enjoyable activity; online shopping is pleasant activity; e-coupons and cashbacks encourages me to shop online; e-coupons and cashbacks encourages me to do unplanned and unwanted shopping; discounts tempts me; I prefer lower priced brands; buying online saves money. The highest loading was for 'fun to buy clothes online' which implies that the fun of buying clothes online is the most important attribute for a generation Y e-consumer while shopping for apparels online. The loadings

range from 0.715 to 0.457. Table 31 shows the mean, standard deviation and factor loading of the variables. Feeling happy and pleasure was found to be one reason for generation Y e-consumers to shop online and also the incentive factor was also found to be important. Apparently, the more incentives an online seller can provide the more could be the interest of the consumer to buy from them.

To test the reliability of this factor Cronbach's alpha was calculated and the Cronbach's alpha value was .870 which means that the scale reliability is high and the correlation coefficient is high. The Cronbach's alpha value indicates that the relationship between the variables is quite high and is not affected by random factors.

### **Societal and external/trust circumstances oriented**

Societal and external circumstances orientation was found to be the third factor that influences generation Y consumers while shopping online. This factor explains the orientation of consumers towards the societal influences of online apparel consumption and external circumstances faced by the e-consumers as a consumer decision making style among generation Y consumers while online apparel purchase. This factor consists of 6 components which are – buy because most of my friends do so; no easy physical access; others like my purchase; online brands are not fake; I trust online sellers sell authentic brands; cheap Internet availability. The highest loading was for 'buy because most of my friends do so' which implies that the influence of peers is significantly high when it comes for a consumer to transform into an e-consumer for apparel purchase among generation Y consumers. The loadings range from 0.695 to 0.447. Table 33 shows the loadings, mean and standard deviation on the variables of this factor. Apart from peer influence, geographical inabilities like not having a traditional shop near to the consumer's location are also found to be an important component. The trust in online sellers is the other influencing factor for generation Y e-consumers to opt for online apparel consumption. However, surprisingly cheap Internet availability has got no huge influence on online apparel consumption intentions in the generation Y e-consumers.

To test the reliability of this factor Cronbach's alpha was calculated and the Cronbach's alpha value was .801 which means that the scale reliability is high and the correlation coefficient is high. The Cronbach's alpha value indicates that the relationship between the variables is quite high and is not affected by random factors.

## **Novelty orientation**

Novelty orientation is the fourth factor that influences generation Y consumers while shopping online. This factor explains the orientation of consumers towards novelty as a consumer decision making style among generation Y consumers while online apparel purchase. This factor consists of 3 components which are: I like to keep my wardrobe up to date; I like brands which are more expensive; I have a favourite apparel brand which I buy over and over. The highest loading was found for 'wardrobe up to date' which means that the wish of being up to date with the new fashion and to keep updating the new styles makes e-consumers of generation Y to opt for the Internet. Perhaps the ease of seeking information online and easily purchasing new fashions from the Internet is positively influencing consumers to adapt to the Internet for shopping apparels. The factor loadings range from 0.761 to 0.443 as shown in Table 35. Apart from the intention to keep wardrobe up to date other components like wish to have more expensive outfits and to buy an impressive brand over and over to showcase seem to be important for e-consumer who follow this style while shopping apparels online.

To test the reliability of this factor Cronbach's alpha was calculated and the Cronbach's alpha value was 0.676 which means that the scale reliability is high and the correlation coefficient is high. The Cronbach's alpha value indicates that the relationship between the variables is quite high and is not affected by random factors.

## **Impulsiveness oriented**

Impulsiveness orientation is the fifth factor that is found to be influencing generation Y consumers while shopping online. This factor explains the orientation of consumers towards being impulsive as a consumer decision making style among generation Y consumers while online apparel purchase. This factor consists of 4 components which are: careless purchase decisions; hard to choose which store to shop from; spontaneous decisions; confused. The highest loading was for the component careless purchase decision. Many e-consumers make careless purchase decisions is the fact that can be derived from this. Availability of abundant information at a click's away could be a reason for this kind of behaviour while attractive advertisements can also account to be a reason for impulsive purchase decision making act. An attractive advertisement can potentially make a consumer to buy it even if they are not in the need of it or for that matter sometimes even when they don't want it, but they buy it just because of the attractiveness of the advertisement or to not miss the discounts/offers. The factor loading ranges from 0.744 to 0.543 as shown in Table 37. Spontaneous intentions of purchasing, confused due to over choice and finding it difficult to

choose which store to shop from were also considered variables related to the impulsive buying behaviour.

To test the reliability of this factor Cronbach's alpha was calculated and the Cronbach's alpha value was .683 which means that the scale reliability is high and the correlation coefficient is high. The Cronbach's alpha value indicates that the relationship between the variables is quite high and is not affected by random factors.

### **Best value oriented:**

Orientation of a balance between price and style is the sixth factor that is found to be influencing generation Y consumers while shopping online. This factor explains the orientation of consumers towards being balanced between the price of an apparel and latest styles upgradation as consumer decision making style among generation Y consumers while online apparel purchase. To keep up the latest style while being conscious about the price is the nature of these e-consumers. Perhaps having efficient filters to set the maximum price and the wished style on websites with no hesitation could be the appropriate reason why consumers of this orientation are shifting towards online shopping for apparels. This factor consists of 3 components which are: I buy apparels as much as possible at sale price; I should buy more carefully; I usually have apparels of latest style. The highest loading was for the component sale price which makes it clear that these consumers are more sensitive to the price and as they are also particular about the latest style this gives rise to the partial conclusion that these e-consumers could be comparatively less focused on the quality. The factor loadings range from 0.574 to 0.482. Table 39 shows the mean, standard deviation and loading of variables of this factor.

To test the reliability of this factor Cronbach's alpha was calculated and the Cronbach's alpha value was .627 which means that the scale reliability is high and the correlation coefficient is high. The Cronbach's alpha value indicates that the relationship between the variables is quite high and is not affected by random factors.

### **Proposed e-consumer decision making styles of Indian generation Y e-consumers in the apparel segment**

Cronbach's alpha scores were computed to assess the reliability of the model. The alpha scores range from 0.922 to 0.627 which indicates that the reliability was high enough. Table 5 explains the details of the newly formed styles as a result of factor analysis.

**Table 5: Proposed e-consumer decision making styles of Indian generation Y e-consumers in the apparel segment**

Styles	Mean	Eigenvalue	Variance explained	Alpha
Website orientation	3.145	11.055	31.584	.921
Hedonistic and Incentive orientation	3.123	4.393	12.552	.870
Societal and external influences/trust oriented	3.135	2.311	6.602	.801
Novelty orientation	3.102	1.683	4.808	.673
Impulsiveness oriented	3.215	1.449	4.140	.680
Price and style balance oriented	3.187	1.078	3.081	.628

*Source: Calculated by the author*

Table 5 shows the final e-consumer decision making styles of generation Y consumers in the apparel segment. Six styles were determined out of which novelty and impulsive behaviour of SPROLES and KENDALL (1986) were proven in Indian generation Y e-consumers in apparel consumption while hedonistic and price consciousness is partially proved but in this research, they were combined with other behaviours, hedonistic with incentive orientation and price with style balancing orientation. Website orientation, hedonistic and incentives oriented, societal and external circumstances influences were new factors that are found in Indian generation Y online apparel e-consumers.

**Classification of consumers into clusters to group similar e-consumer decision making styles:**

Cluster analysis was used to group similarly oriented consumers together. The groups so formed were labelled according to the set of orientations they retain. The K-means cluster analysis was employed to do the segmentation of the e-consumers according to their decision making styles which were derived out of factor analysis performed prior to this. The K-means cluster analysis has produced 3 segments of e-consumers. A significant difference between the segments of consumers was identified for 5 of the 6 consumer decision making styles except for the website orientation. According to ANIC ET AL., (2009) and ANIC ET AL. (2010), the CSI instrument can be used for segmentation purpose, the results of the cluster analysis of this thesis have once again

proved the same that the cluster of e-consumers could be made based on the CSI instrument. The segments so formed as a result of K-means cluster analysis were labelled as:

1. Balanced e-consumers.
2. Enticed e-consumers.
3. Hasty e-consumers.

The characteristics of each of the developed segments are explained and pointed out below.

#### **Cluster 1: Balanced e-consumer**

The consumers falling in the first cluster show high concerns towards societal and external circumstances and have significantly positive concerns towards being the best value oriented and impulsive in nature. The combination of impulsive to the best value oriented is peculiar, it has to be understood as these e-consumers could be hasty while they make online apparel purchases however they tend to be balanced with their hastiness and carefully watch the finances to get the best value even out of impulsive buying behaviour.

These e-consumers exhibits the least orientation towards novelty, hedonistic and incentives respectively and the group is insignificant to the website offerings.

#### **Cluster 2: Entice e-consumer**

The e-consumers grouped in the second cluster exhibits entice behaviour. E-consumers belonging to this cluster can be explained as being very conscious about the fun of shopping online. At the same time entice e-consumers are novelty conscious and they are significantly particular about the websites they chose to shop online. They are also the best value seekers, however, this quality of seeking best value is the least ranked orientation in the entice e-consumers. To put it simple, entice e-consumers are fun loving consumers and they seek happiness in e-shopping and they tend to buy updated fashion from prominent websites which offer the best value to their purchase. Entice e-consumers are observed to be less affected by the factors of the social and external circumstance and are also not impulsive while shopping.

### Cluster 3: Hasty e-consumer

The generation Y e-consumers belonging to the third cluster which is labelled as hasty e-consumers, significantly display strong impulsiveness and are also significantly website conscious, which implies that the e-consumers of the third segment are impulsive while shopping apparels online and are also possess a significantly positive orientation towards website characteristics. The cluster analysis results show that the e-consumers belonging to the hasty e-consumers segment exhibit significantly least bothering towards social and external circumstances, hedonism, incentives, novelty and best value orientations and thus the label was given as hasty e-consumers. Table 43 shows the third cluster of e-consumers.

The table below shows the comprehensive details of each cluster segment identified from K-means cluster analysis with their respective styles, the label given, frequency of respondents and percentages respectively.

**Table 6: Comprehensive details of the e-consumer segments**

Cluster	Styles	Label	Frequency	Percentage
1	<ul style="list-style-type: none"><li>• Societal and external circumstances</li><li>• Novelty orientation</li><li>• Impulsive behaviour</li><li>• Best value oriented</li></ul>	Balanced e-consumer	153	45.67
2	<ul style="list-style-type: none"><li>• Website orientation</li><li>• Hedonistic and incentive orientation</li><li>• Novelty orientation</li><li>• Best value orientation</li></ul>	Entice e-consumer	102	30.44
3	<ul style="list-style-type: none"><li>• Impulsiveness orientation</li><li>• Website orientation</li></ul>	Hasty e-consumer	80	23.88

*Source: Calculated by the author*

Table 6 indicates the frequencies and percentages of each cluster. The highest number of generation Y e-consumers belong to cluster 1 which is labelled as balanced e-consumers. A total of 153 respondents with 45.67% belong to this cluster who have a strong orientation towards societal and

external circumstances; novel products; impulsive behaviour; best value. The second cluster – entice e-consumers has 102 respondents belonging to it with 30.44% of total respondents who has a strong orientation towards the enjoyment of online apparel shopping. The third cluster consists of 80 e-consumers with 23.88%, this group of people have a significantly strong orientation towards impulsiveness and website attributes and labelled as hasty consumers.

The significance of clusters to the demographic variables was checked using cross tabulation and the demographic variables did not show any significant differences except for the respondent’s residential status. The cross tabs analysis is presented in the following section.

**Cross tabs**

To test hypothesis 7 which is if demographic variables affect consumer segments, cross tabs were used. To see if there is any significant difference of demographics on the clusters of e-consumers. Cross tabs were used to check the significance of demographic variables: gender, marital status and residence status of e-consumers on each of the clusters. The demographic variables: gender and marital status showed no significant impact on the cluster, however, the resident status of the e-consumer have a significant difference on the cluster. Table 7 shows the significance of the demographic variables.

**Table 7: Significance of demographic variables**

Sl. No.	Demographic factor	Significance
1.	Gender	.967
2.	Marital Status	.573
3.	Residence	.018

*Source: Calculated by the author*

As the gender and marital status of the respondents have proven to be insignificant, both of those factors are ignored for further analysis, however, for the resident status factor, crosstabs were employed to check the relation between resident status of e-consumer to the e-consumer segments relation. The results are illustrated in Table 8.

## Impact of residence of consumers on clusters

Table 8 shows the relation of consumers' residence and the clusters formed i.e. the relationship between the urban, suburban and rural e-consumers and balanced e-consumer, entice e-consumer and hasty e-consumer. The first cluster consists of the highest percentage of urban consumers which is 49.8% which is above the mean value which is 45.7% followed by the sub-urban consumers who are 42.6% and the least are 24.3% consumers who are rural consumers. These observations imply that urban consumers come under balanced consumer type followed by sub-urban and the least number of rural consumers are balanced consumers. The second cluster's mean is observed to be 30.4%, rural consumers related more with the second cluster with 43.2% which is more than the mean value, the urban consumers are almost near to the mean value with 30.0% and finally, the suburban consumers are the less than the mean value with 24.6%. This implies that rural consumers are highly entice type of consumers. The third cluster is hasty consumers. The mean of hasty consumers was observed to be 23.9% and sub-urban consumers count was 32.8% which is closely followed by rural consumers with 32.4% and urban consumers are the least count with 20.3%. This result implies that suburban and rural consumers are hasty while shopping online for apparels and urban consumers are not.

**Table 8: Impact of residence of consumers on clusters**

			Cluster Number of Case			Total
			1	2	3	
Residence of consumers	urban	Count	118	71	48	237
		% within residence of consumers	49.8%	30.0%	20.3%	100.0%
		Adjusted Residual	2.4	-.3	-2.4	
	sub urban	Count	26	15	20	61
		% within residence of consumers	42.6%	24.6%	32.8%	100.0%
		Adjusted Residual	-.5	-1.1	1.8	
	rural	Count	9	16	12	37
		% within residence of consumers	24.3%	43.2%	32.4%	100.0%
		Adjusted Residual	-2.8	1.8	1.3	
Total		Count	153	102	80	335
		% within residence of consumers	45.7%	30.4%	23.9%	100.0%

*Source: Calculated by the author*

The chi-square test exhibits that the significance of consumer's geographical residence over the clusters is 0.018, which means that the significance levels is less than 0.05 and which means there are differences in the residential status among clusters. Table 9 shows the details of the chi-square test.

**Table 9: Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.857 <sup>a</sup>	4	.018
Likelihood Ratio	12.160	4	.016
Linear-by-Linear Association	8.612	1	.003
N of Valid Cases	335		

*Source: Calculated by the author*

### Summary of hypothesis testing

The hypotheses made for the thesis were all accepted except one which is partially accepted. Table 10 shows a summary of the hypothesis testing.

**Table 10: Summary of hypothesis testing**

Sl. No	Hypothesis	Result
1.	Generation Y e-consumers of India are website oriented	Accepted
2.	Generation Y e-consumers of India are hedonistic and incentives oriented	Accepted
3.	Generation Y e-consumers of India are societal and external influences oriented	Accepted
4.	Generation Y e-consumers of India are novelty oriented	Accepted
5.	Generation Y e-consumers of India are confused and impulsive	Accepted
6.	Generation Y e-consumers of India are best-value oriented	Accepted
7.	Demographic variables affect consumer segments.	Partially accepted

## **NOVEL FINDINGS OF THE DISSERTATION**

The present research work is believed to provide novel contributions towards the knowledge of e-commerce of the apparel industry among generation Y consumers of India. The main aim of proposing a consumer decision making style inventory and to segment e-consumers based on their decision making styles are fulfilled through this research work. This chapter provides the novel findings of the research followed by conclusions and finally provides further research recommendation in this field of research.

### **Novel findings**

Through this research, it is identified that the consumer decision making styles are not purely personality traits but there are other dimensions to it such as website offerings, incentives, coupons etc. which is proved in this research.

- The research found out that the attracting of consumers is directly proportional to the attractiveness of the website in various aspect like design, ease of use, offers, etc.
- The results proclaim that societal influences such as peer/friends influences, societal acceptance and appreciation are leading towards opting for Internet shopping over traditional shopping methods.
- It is evident from the research that the external and generally non-controllable attributes like non-availability of stores nearby are proven to be reasons for opting for online shopping.
- In this research, careless shopping and spontaneous decision making behaviour were identified in online shoppers and perhaps this behaviour is due to the information overload experienced by the e-consumer.
- It is evident from this research that the ability to surf products customisable according to the latest style at convenient prices is allowing e-consumers to make a price and style balance and such consumers who are particular about balanced purchasing are preferring online shopping.

## **PRACTICAL APPLICABILITY OF THE RESULTS**

### **Value for researchers**

The present thesis examined the consumer decision making styles of Indian youth in the online apparel segment. The results have proven to be different from that of the original consumer style inventory which was proposed by SPROLES and KENDALL (1986). This implies that

1. The present generation has developed new trends and decision making styles pertaining to technological developments. This research can be helpful to future researchers who would like to extend their research in the area of consumer decision making styles in the online environment.
2. The research has proven that online shopping is quite different from that of traditional in-store shopping.
3. Even though many researchers have tried to check the validity of the original consumer style inventory (CSI) in their geographical locations and countries, many of them have always tried to check if the 8 CSI match with their respondents' data or not. But in this research attempt has been made to propose a new CSI altogether to match India's generation Y consumers. So the results can be used directly by future researchers.
4. Future researchers can use the methods to further research this topic to enhance knowledge.

### **Value for the marketers**

More than anyone, the results are targeted to benefit marketers in the following ways.

1. The results give a comprehensive understanding of what kind of orientations does an Indian generation Y e-consumer has.
2. Marketers can be well informed about the present e-consumers' typical shopping styles in the apparel sector.
3. Effective marketing strategies could be designed if the information regarding the consumer's orientations is available and this research has addressed that issue.
4. Enhancing their websites with various attributes as suggested in the thesis to attract and retain mass consumer groups, as it is clear in the results that website orientation is a major factor for online shopping intention.
5. Relating to the results marketers can make sure that the reviews are prompt as the reviews are a major determinant for online shoppers to decide if to buy or to not.

6. Relating to the results marketers can design websites more pleasantly so as to attract hedonistic consumers.
7. Relating to the results marketers can encourage offers and incentives as the results suggests that consumers are highly attracted towards incentives.
8. Finally, this thesis can help marketers to perform better in the online markets in the apparel segment.

### **Limitations**

Like in most of the researches this research also has its own limitations which are to be taken into account while interpreting the results or any knowledge out of this thesis. The first limitation of this research is its representativeness. In spite of the adequate data collected, the majority of the sample was collected from students of only a few universities according to the researcher's contacts and connections. These students do not represent the entire generation Y e-consumers. So the sample can be said to be non-representative and the generalisability of the results to the whole considered group (generation Y e-consumers) is questionable.

The other limitation of this research is that the study was conducted to examine the consumer decision making styles in online apparel purchases, the results may not be necessarily true to the other sectors of online shopping.

Only generation Y students are considered to be researched for this study and this is another limitation to be considered.

### **Recommendations**

I recommend further research in the area of consumer decision making styles. I firmly believe that consumer design making styles keep changing with the advancements in the medium used to shop. As technological advancements are being witnessed with a rapid speed, consumer decision making styles are getting more and more influenced by the Internet. Further, researchers must research other sectors of online shopping apart from apparel. Future researchers could also consider researching other generations apart from generation Y as the literature says that there is an impressive growth in adopting online shopping among older generations too.

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## **PUBLICATIONS ON THE TOPIC OF THE DISSERTATION**

1. **Sakshi, S.:** Orientations of consumers in online shopping: A literature review. Abstract. [Epub ahead of print] (-), 1-8, 2021. ISSN: 1789-221X.
2. **Shivam Sakshi,** Peto Karoly (2020). Online apparel shopping hesitation. Economic and Working Capital Journal
3. Chidanand Patil, **Shivam Sakshi** and Chaitra G. B (2020). Analysing the factors influencing consumer willingness on Agritourism – An evidence from Hungary. Research Journal of Agriculture Sciences.
4. **Shivam Sakshi,** Peto Karoly (2018). Overview of Indian fast moving consumer goods sector, focus on rural India; Cross-Culture Management Journal, Volume XX, Issue 1 / 2018.
5. **Shivam Sakshi,** Peto Karoly (2017). Brand Equity in Rural Markets. The Annals of the University of Oradea; Issue: 1, June 2017 ISSN: 1582-5450.

## **OTHER PUBLICATIONS:**

1. **Shivam Sakshi,** Jishnu Bhattacharyya, Manoj Kumar Dash, Sahu M. Customer centricity in organized retailing – A guide to the basis of winning strategies. Palgrave Macmillan, Springer Nature. (Proposal accepted).
2. Jishnu Bhattacharyya, Manoj Kumar Dash, Soumyadeep Kundu, **Shivam Sakshi,** Kamalika Bhattacharyya, Karina Bhatia Kakkar (2020). No Virus on Me: The Indian Ways of Managing the COVID-19 Pandemic, Marine to Mountain. Asian Journal of Management Cases. SAGE. (Under review).
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### List of publications related to the dissertation

#### Articles, studies (7)

1. **Sakshi, S.:** Orientations of consumers in online shopping: A literature review.  
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2. **Sakshi, S.,** Pető, K.: Online apparel shopping hesitation in India.  
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*Global Journal for Research Analysis. 3 (8)*, 59-61, 2014. ISSN: 2277-8160.

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