

**EVALUATION OF THE SATISFACTION  
IN TERMS OF PRODUCT QUALITY OF  
WOMEN'S CASUAL WEAR IN SRI LANKA**

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## Declaration

“I declare that this is my own work and this research does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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The above candidate has carried out research for the master’s Dissertation under my supervision.

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Signature of the supervisor:

\_\_\_\_\_  
Date :

## **Dedication**

I lovingly dedicate this thesis  
to my mother  
and my wife;  
for the strength and courage given.

## **Acknowledgement**

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## **Abstract**

There has been a significant growth in the apparel retailer market in Sri Lanka during the last decade. Statistic shows middle-class population had grown faster in Sri Lanka, and branded and organized retail has improved with changing spending patterns of people. A tremendous retail potential can be identified in city Gampaha, as the second largest household income sector of the country. It had been expected to witness retail development in terms of apparel retailing. The sustainability of this segment of apparel retail depended, on the ability to satisfy target customers satisfaction.

The purpose of this study is to evaluate the level of customer satisfaction based on quality of clothing that they were offered by the retailers. Hence the study provides directions to fashion retailers and product developers to understand the key measures of product quality that affect level of customer satisfaction. Further the study helps to understand the level of customer satisfaction.

A survey of 143 customers, who are frequently visiting casual wear retailer shops, were targeted and questioned using the questionnaire form, to get the required details for the research. This data was analyzed by using questionnaire surveys to measure the level of customer satisfaction towards product quality. Researcher has disregarded the customers who do not represent the population & as a result the designated customer group had come down to 100 customers for the data analyzing.

The results of the research emphasized that, customers are satisfied with Performance, Features, Reliability, Conformance, Durability, Serviceability & Perceived quality. But they are negatively satisfied with Aesthetics, Features, & Durability. This research finding, and recommendations are verified & tested in the research paper by using the analytical tables and figures.

Finally, this thesis presents the quality gap of the product offering as a means of listening to the real voice of customer and improve customer satisfaction. Further, this research is an instrument developed, to provide an insight, to which apparel retailers can directly understand, the levels of full-filled expectations of their clientele, with the offering they provided, based on apparel product quality.

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# **CHAPTER 1: INTRODUCTION**

## **1 Background of the study**

Global markets have undergone an unparalleled transformation over the past several decades. Political and socio-economic transformations have expanded consumer choices, fueled the growth of the middle class around the globe, and created massive wealth. The digital revolution has empowered these same consumers, through access to information. Within the present scenario, former market of the manufacturer or provider is, now transformed in to a customer market, where customers have great power. Accordingly, customer satisfaction is a very relevant problem from the perspective of sustainable business companies in modern market conditions, within the conditions of the new economy. Therefore, major challenge for retailers today is to address the needs of the consumers more effectively which should not form any disappointment and meets the product/service performance by capturing new characteristics of the industry to ensure consumer satisfaction.

### **1.1 Research problem**

Despite a significantly smaller consumer base than in neighboring India, the retail sector in Sri Lanka has recorded formidable growth in recent years, (oxford business group, 2018). This was the result of strong macroeconomic fundamentals, rising incomes, high levels of household expenditure and shifting consumer trends. According to the country report produced by Oxford business group, Sri Lankan spending patterns resemble those in Western countries, with a rising consumer preference for lifestyle products and aspiration luxury goods, in sharp contrast to other South Asian and South-east Asian countries. In the fast-moving commercial goods segment, for example, demand for personal care items had an increase.

Although it was recognized that the Sri Lankan retail sector was booming, level of customer satisfaction for the offerings provided by Sri Lankan clothing retailers were not widely understood. While all offerings can be located on a goods-service continuum, with pure goods on one extreme and pure service on the other, most industries were between the two extremes (Rathmell 1966). Kotler (1997) identifies three major components of market offerings such as: Product Quality, Service Quality and Price fairness, that can be offered by a company to meet customer satisfaction, Mainly the product quality was known as a main factor for customer satisfaction for product selling companies such as apparel retailing. The most studies revealed that, a close relationship between customer satisfaction and quality of product would exists (Hansemark & Albinsson, 2004).

Therefore, purpose of this research was to assess the level of customer satisfaction for product quality offered by Sri Lankan apparel retailers.

## **1.2 Significance of the study**

Although product quality was a significant parameter to assess the level of customer satisfaction for product quality, Sri Lankan apparel retailers would not widely understand the importance and the level of satisfaction they have met with the offering provided to date. The study provides guidance to Sri Lankan apparel retailers to understand the measures of product quality and the level of customer satisfaction for each measure. Further, study specifically helps apparel retailers to understand the quality parameters, which were not at the expected level of customer satisfaction. Hence the Sri Lankan apparel retailers get the opportunity to improve the product quality offered to improve the customer satisfaction.

Further, the literature that assesses the level of customer satisfaction for apparel product quality was also scarce (Stoelb & Kim, 2004). Hence the study provides knowledge in understanding the key dimensions of product quality and the level of customer satisfaction.

## **1.3 Aim and objectives of the study**

1. Aim is to find out the level of customer satisfaction of the casual ware clothing available in the Sri Lankan retailer market.

### **1.3.1 The objectives of the study**

- a. identify the key measures of product quality that impact level of customer satisfaction.
- b. To assess the level of customer satisfaction towards product quality offered by Sri Lankan apparel retailers.
- c. To make recommendations to improve the level of customer satisfaction.

## **CHAPTER 2: LITERATURE REVIEW**

### **2 Introduction to chapter**

The relevant literature was studied to understand the key measures of product quality that impact the level of customer satisfaction. Further the literature review was extended to develop a conceptual framework to understand the level of customer satisfaction for product quality, using the key measures identified. Research questions were formulated based on the conceptual framework.

#### **2.1 Product Quality**

Quality is a multifaceted term. Garvin (1987) propose eight critical dimensions or categories of quality that can serve as a framework for strategic analysis: performance, features, reliability, conformance, durability, serviceability, aesthetics, and perceived quality. These 8 dimensions will be the key quality measures in the research and each dimension will be describe below with the reference of the other researchers who had study same dimensions.

In their book *Quality Costing*, Dale (2017) mention the customer satisfaction of the product was based on its conformance, reliability, durability, interchangeability, performance, features, appearance, serviceability, environment and user-friendliness and safety. (Dale et al (2017). Researcher has listed the literature of these factors to identify the quality factors of the apparel and to form the framework to the study. Same will be the benchmark to form the questionnaires. Kevin (2001), highlighted product's primary characteristic as "Product reliability, durability, and serviceability" in his book "Building customer-based brand equity", Keller (2001). He highlighted, most important satisfactory measuring point of quality, is to relate quality on perceived quality of brand. The true judgment on quality and credibility perceptions can be led to the brands success. Based on Garvin (1987), Dale (2017) and Kevin (2001), frameworks that defines key parameters of product quality as, which impacts customer satisfaction are product quality that significantly influences the level of customer satisfaction. Such as performance, features, reliability, conformance, durability, serviceability, aesthetics, and perceived quality. Following sections further operationalizes the key parameters that measures product quality with the use of literature that discuss apparel product quality.

### **2.1.1 Product Performance**

Product Performance refers to a product's primary operating characteristics. (Garvin, 1987). The performance of a product often influences the customer satisfaction of the end-user. If the basic functions had not performed well, the customers will not be satisfied.

Performance and versatility were become gradually important. Accordingly, in apparel products, fabrics used to fulfill fashion or style function. Not only that, but also a clearly well-defined performance need (Fashion Marketing, 2016). Different fabric gives different comforts and hand feel. Enhancing the comforts and hand feel performance of the casualwear product certainly leading the customer satisfaction.

Garments that can perform multiple functions than wearing, identified as garment with Functionality qualities. Wearing is the fundamental garment function and customers look beyond this quality function at buying decision, (The medium corporation, 2018). Customer buying decision depends on meeting his/her expectation. if the expectation could not meet the customer will be dissatisfied on the product. Thus, the buying decision will not terminate for this product.

Churchill and Surprenant (1982) defined quality as belief statements or attribute performance. In their research they showed most validate measures of quality were the performance and the performance-based operationalizations. In apparel retailing accessories had used to give a functioning performance. This study pursued real customers view point for characteristic performance from the selected customers via a questionnaire to evaluate functioning performance vs satisfaction.

Shweta & Lawrance (2015) in their Research highlighted, the objectives of their study were to develop an understanding of fabric quality related issues and research gaps relevant to apparel manufacturing and merchandising. According to them a Manufacture should know about Fabric Objective Measurement (FOM), which provide a more complete picture of fabric quality, tailor ability and clothing performance. And the analysis of the questionnaires and interviews has in clothing sector displays most of them were unaware of the quality stands. In this study researcher has included the questions which was to evaluate the quality, and which describe the quality parameters.

In terms of garments we can identify attribute performance feathers as keep cool, comfortable and dry using moisture management and other techniques, (Little, 2016). Not only the athletes clothing, casual wear garments no longer represents just status and sophistication — functionality and performance count and clothing should be fit for a purpose. Customers are educated, and they always look for the best quality.

### 2.1.2 Product Features

Features were additional characteristics that enhance the appeal of the product or service to the user. (Garvin, 1987). Author also mentioned, characteristics that enhance apparel wearable & basic functioning of a product, was also identify as Features of a garment. Basic features of a garment can identify as collars, hoods, pockets, bands, ruffles & cuffs. The garment pieces which enhance styling & wearable characteristics of an apparel product is in this category.

Companies often introduce new product features to differentiate their brands and gain a competitive advantage within the competitors and attract the customers (Stephen & Simonson, 1996). The authors investigate factors to improve the quality impact of a new feature as to give different choice to customer for product selection at the buying decision made. Different choice gives options to select and different customers views will be fulfilled in terms of new product features to fill customers' needs to satisfy.

Jones (2005) describes "Comfort" as hand feeling, lighter weight. She said stretch materials will have more Comfort. Customers today has lot of options and high number of retailers to select the products. To win the competition "Comfort" was one Feature which to be acquire in a product mix. Mostly in every garment.

When consumers were uncertain about the values of products and about their preferences, features provide reasons against buying the products as susceptible to criticism, (Simonson, Carmon & Suzanne, 1994). Features play a bigger role at the customers buying decision making. If they were not satisfied they would not buy the product. Authors says unique features was used by respondent customers were the reason for choice. The researcher was seeking, if different look and designs of a garment, would be resulting "the reason for garment buying" of a true customer in the questionnaire.

Kano's model was used to establish the importance of product features for the customer's satisfaction (Stroud, 2018). This shows the importance was Expected product features of a product and how customer satisfaction/ credits to the retailer can be improved by Unexpected product features that would impress customers. Retailers needs to educate on the product new Features to their customers by using methods like proper packaging and labelling. Knowing the importance of product features increase the usage of the product in fulfilment of the need. Thus, this leads to Satisfaction gain.

Clothing is a perfect way to express your unique personality and style, Newman (2012). Features quality is important in a garment, right look, well-fitting, trendy, Reasonable Pricing are important.

### 2.1.3 Product Reliability

The most traditional notions of “conformance and reliability” remain important quality concerning, but they were incorporated within a larger strategic framework, highlighted by Garvin (1983) This dimension reflects the probability of a product malfunctioning or failing within a specified time-period. Reliability was a major contributor to a retailer’s image as reliability was considered a fundamental dimension of quality by most end-users. Garvin (1987) was specially highlighting “especially for women, reliability has become “an important parameter when it comes to satisfied them with a product. Further he pointed out a recent market research showed a supplier who offer product which fail frequently was taken out from the competition. The reliability in quality is that much important to success in the market with other competitors.

Customers of fast fashion expect to have a great variety and choice of up to date well-designed clothes. (David, 2008). The apparel industry has noticeable changers in the products and customers look for fashion changers in every product category. Even for the casualwear. Researcher has added several questions to see if the retailers in Sri Lanka has offered Reliable casualwear clothing to their customers. Retailers today must act faster possible with the fashion change to full fill the customers satisfaction.

Zara checks each delivered item twice for quality (Walker et al., 2000). They further explain Zara’s workshops teams were fully aware of the quality stands which create a low risk of the items being rejected. Which was also an insight for Sri Lanka’s retailers. Allocating time for twice quality checking maintain a high product quality in terms of reliable clothing. No customer was like to allocate time and efforts to exchange a garment and this process had negative impact to the customer satisfaction.

Several surveys have voiced consumers' dissatisfaction with the existing levels of quality and service of the products they buy, (Garvin, 1984). Product quality is rapidly becoming a significant competitive issue in the market and author shows American managers were searching the superior reliability of many Japanese products to see how they differentially made. Such strategies impose heavy demand on quality assurance teams to give an assurance of the clothing.

Wiener (1985) questioned “Are warranties accurate signals of product reliability”? in his Journal he was able to show that even after controlling for other cues, warranties were accurate signals for a Reliability. In apparel retailing products like Leather garments, proceeds with special garment application (sequence / motifs / fur / ribbon made bow / special buttons) and garments with special finishers (casual shorts and skinnies with water repellent finish, clothing with special colors such as; multi water colors, tie dyes) were given warranty for washing cyclers and wearable warranty for special finishers. These will create aware of the quality reliabilities. This trust was leaded to the customer satisfaction. Some retailers offering lifetime guarantees on their products (“Lands’ End Home,” 2018).

Enhancing the reliability of products will not only provide economic benefits to consumers (Maurer & Pahl, 2015) author says reliability in a product was also help

the customer to have a satisfaction which reduced risk of wearing and also helps the overall economy, as this reduced waste and also reduce product returns due to failure which currently costs. Consistent and products possibility to repair were provide value for money and gives customer satisfaction.

#### **2.1.4 Product Conformance**

High levels of conformance quality must be accomplished before trying to improve any other of the performance dimensions (Nakane, 1986). The logic being this argument was to reduce, rework was the outcome from poor conformance quality. Which leads sales drop due to customer satisfaction on quality. poor conformance quality experience leads customers to express the lower level of satisfaction of other users.

The most traditional notions of “conformance and reliability” remain important quality concerning, but they had incorporated within a larger strategic framework (like apparel retailing), highlighted by Garvin (1983). Author had also highlight measures of conformance normally focus accuracy on measurements leads fitting and timeliness on delivery and include counts of processing mistakes which leads poor outcome of styling, unexpected interruptions, self-fabric tearing, stitch broken while wearing and other frequent mistakes in sewing were key parameters of the conformance which retailers needs to avoid gaining maximum customers satisfaction. The author is also indicated a product deviation from standard like “misspelled labels or shoddy construction” is considered as a frailer of the conformance quality.

Production-Based Approach, which Garvin labelled the “manufacturing approach,” views quality as “conformance to requirements.” (Fields et al,2014) authors under this approach, state any eccentricity from the customer’s requirements reduces quality. In this article authors view conformance of the quality as a numerical dimension for a product’s performance, such as capacity, speed, size, durability, color, or the like. (easily quantified and difficult for a service to conform).

Quality of conformance concerns how well the product conforms to design specifications (Reeves & Bednar 1994). Although various aspects of quality have been investigated, authors specially mention quality of conformance, the degree to which a specific product conforms to a design or specification leads customer satisfaction. Further they evaluate most of other factors as alternatives and implications for the quality definition.

The relationships between the main product and sub products like accessories were supportive to offer a good quality product to a customer identified by Popescu & Etzioni (2007). In the book, chapter 2 which was focuses on product reviews, and ideas product features explain the importance of the Features for a quality product. Function of closures, buttons, zippers and other accessories in a main product gives the value and functionality enhancement to a main product that gives customers pleased & satisfied.

Product quality means to incorporate features that have a capacity to meet consumer needs (wants) and gives customer satisfaction by improving products (goods) and making them free from any deficiencies or defects, (Gaurav, 2013). Defect was a quality issue and defect free was a product quality of a garment. Some defect would be less noticeable to customer, but it's not less important. Research says quality was some incorporate features will all include. Retailers must understand the important to gain high Customer satisfaction and gain high rank of product Conformance.

### **2.1.5 Product Aesthetics**

According to Garvin (1987) Aesthetics is, how a product looks, feels, sounds, tastes, or smells, as a matter of personal judgment and a reflection of individual preference. In this study individual preference was most important as every customer sign the questionnaire base on her individual preference. In this research researcher will observe, how this Aesthetics properties effect the individual preference of satisfaction. Aesthetics was clearly a matter of personal judgement and a reflection of individual preference which were also the matter of customer satisfaction. Questionnaire of this study has direct questions to see the customers satisfaction level base on these Aesthetics properties.

Jones (2005) highlighted different finishers will also use as customers were now demands for emotional comfort and fashion look, (Jones ,2005). She points out how important to have the correct colors to meet customer expectations. And yet she did not forget to mention the clothing industry is becoming complex and competitive industry.

While most of them had worked on more theoretical ways, (Parker, Hermans & Schaefer, 2004). This Journal written on buying behaviors of teenagers in China, Japan and America. In their study they tried to find out, what preference they referred while purchasing clothes. One of the natural factors they found was females had a great attraction for stylish clothes while they select the carts of cloths. But the second factor was not as much as similar. As general teenagers were stylish, but the authors were found that these teenagers had not mind, if their friends have the same clothes while they give the preference to comfort and trendiness. It's a Quality factor they search for.

Crosby (1979) defines quality as "conformance to requirements." This also says quality was an elusive and indistinct construct. Often false for imprecise adjectives like "goodness, or luxury, or shininess, or weight" (Crosby 1979). Goodness and luxury can be achieved with function of closures, buttons, zippers and other accessories and by proper packaging and labelling. Thus, this study will accomplish the questionnaire with testing the satisfaction level of true customers in these aspects.



### **2.1.6 Product Durability**

Garvin (1987) describe durability as the “amount of use one gets from a product before it deteriorates” and also “replacement is preferable to continued repair”. Author suggests that durability is a potentially productive area for further quality differentiation which achieve customers attraction and satisfaction. In apparel, durability is a key component for a product like casual ware as casual wear not a product range which use onetime. Middle income customers used to wear products in a longer period of time (Gwozdz, Nielsen, & Müller, 2017), and some of them engaged with reuse and recycling practices (Hvass , 2014) in one family or within relatives.

McLaren et al, (2015) in their journal of Clothing longevity perspectives, describe about Consumers’ expectations of clothing durability. They highlight durability is positively related for the customer loyalty.

Durability can be defined as the amount of usage, a customer gets from a product before it deteriorates (Oliver, 1836). durability figures should be interpreted with product care. If the product has a unique usage this needs to pass to the end customer. Like garments with sequence should not be wash and Iron. Ability of a product to exit without significant deterioration by resisting the effects of heavy use, corrosion, drying, volatilization, wetting, thawing, heating, oxidation & freezing gives a high durability to a clothing and the accessories in it. Relatively long continuous useful life of a product, without requiring a modification or repair was tested in the questionnaire to measure the satisfaction levels.

Monopoly versus competition on the quality and durability of goods effecting market structure (David & Yoram, 1973). Apparel retailers don’t have a monopoly where we found 6 of companies who drives the middle-income customers and there had many other retailers. And the competition was very high. Authors shown quality as independent in variable in market but durability as a variable factor of quality.

Quality helps a firm gain a competitive advantage by delivering goods to the marketplace that meet customer needs, (Laura, Vickery & Droge, 1996). But authors find “durability” as the most influential attribution. Authors also highlighted in the paper as Quality remains the foundation of competitive advantage in meeting customer satisfaction.

### **2.1.7 Product Serviceability**

Brand Marks and Spencer in their “supplier management” section accentuated, the minimum requirements for suppliers and factories to meet Marks and Spencer commitment to customers to deliver products that were safe, legal and good quality. Researcher has 12 years of garment merchandizing carrier history have experienced almost every brand have high safety stands when manufacture and handling clothing. Safety was one of the main concerns all brads has. Hence researcher was also had

concerns if the local retailers were offered casual wear clothing which had manufacture according to Safety standers. And Do the customers had already search for a garment with safety. Two direct questions were added to Quality section to get customer feedback to measure same. (Marks and Spencer cooperate, 2018)

Zara can deliver the new design clothing from the drawing board to the stores in less than two weeks and therefore can respond very quickly to fast-changing perceptions of their young customers (Walker et al., 2000).

Consumers were concerned not only about a product damager, but also about the frequency with which service was called. (Garvin, 1987). These concerns were share with the users of the retailer shop.

### 2.1.8 Perceived Quality

Jones (2005). in her book Fashion Design, highlighted as, young women were attempting to conform to the usual ideal of beauty by Bodily contortions and reshaping through foundation garments, padding and binding have altered the fashionable silhouette throughout the ages. Means they were looking at fashionable garments and they would even adjust their body to have them fit, (Jones, 2005).

Reputation is the primary character of perceived quality, but Perception is what's generate with the perceived quality and it's not always reality (Garvin, 1987). Customers not always have the complete information about a product's attributes. They complain base on quality they feel when use. Author also mentioned retailers who own the reputation and reliability in customers mind most of the time wins the competition.

How would it feel if we say the traditional word of mouth is very strong tool used to explain the quality of product? (Nasir et al, 2012) focuses on the buying behavior of women in Pakistan at the industry of local apparels using 200 local women in Lahore city in Pakistan. The research was to find, if the Social media play a significant role of spreading garment quality details among the apparel industry. But the results were that, local women's in Pakistan has used the traditional word of mouth to be more authentic than social media to search the quality of the Apparels produced in Pakistan & for making purchase decisions. Researcher pay attention the roll of social media and traditional word of mouth at the questioner.

Zara staff and outsourced workshops having clear instructions for the work to be "quality checked two tomes" before the apparel send to end customer was to have a low risk of the items being rejected, (David, 2008). Zara checks each delivered item twice for quality and all their workshops teams were fully aware of the quality stands which create a low risk of the items being rejected (Walker et al., 2000).

Researcher found a research which highlighted, the product quality has high impact on consumer decision- making and on customer satisfaction, but not the price or brand name, (Sandra,1991) in his Clothing and Textiles Research Journal emphasized, the brand name too did not affect the perception of garment quality. The study was a Clothing and Textiles research, examined the effect of product characteristics and brand on retailors to witness the impact on consumer decision- making. The author was forces on quality & brand to measure the consumer decision- making evaluations. With the help of ANOVA Test Sandra (1991) reached to the conclusion that brand name did not affect the perception of actual garment characteristics. customer was satisfied base on garment quality & characteristics.

Packaging and labeling is one of best way of displaying the brand and to gets customer loyalty which leads to improve the sales, (Dumasi, Dhurup & Mafini (2014). This research on paint retailing industry. Using a quantitative survey, they found the results which suggest that management should, initiate and implement effective packaging, pricing and brand awareness to enhance consumers' brand loyalty to the company's products. Do Sri Lankan retailers on clothing practice Packaging and labeling to gets customers attention. Do customers notice them and happy on those? The research will

be questioning customers on effective packaging, pricing and brand awareness to perceive, if they were satisfied with what's available.

Unique merchandising and advertising campaigns has recognized leading quality brand of "Gap" in a store for casual clothing, (Sherrie & Brian, 1997). Authors highlight the incident of recent advertising campaign called "Individuals of style" showed high-profile personalities from show business, sports, etc. which makes the brand 's quality products awareness.

Perceived quality is defined as the consumers' judgment about an entity's (service's) overall excellence or superiority (Rowley & Aldridge 1998; Zeithaml, 1988). Perceived quality is basically the overall customer's perception about the quality of a product. Evidence from prior studies has indicated that there was a positive and direct relationship between perceived quality and customer satisfaction (Parasuraman, et al., 2002).

## **2.2 Customer Satisfaction**

Howard and Sheth (1969) highlighted consumer satisfaction as a related psychological state to judge the reasonableness between what he gets and gives. Churchill (1982) suggested consumer satisfaction resulted from purchasing and using a certain product, which was made by a consumer to compare the expected reward and the actual cost of the purchase, (Churchill and Surprenant, 1982)

Kotler (1997) defines customer satisfaction as a "person's feeling of pleasure or disappointment resulting from comparing a market offering in relation to his or her expectations." The true customers of the retailer shops were selected for the research to see the levels of expectations meets with the product offering of the retailers in casual wear sector. This was to capture the real feeling of pleasure or disappointment to words the retailing shops offerings.

Middle-income consumers mostly trade-off between what they can afford and their fondness of quality, (Ahmed, Khan & Samad, 2016) Income is a important consideration in terms of determining buying behavior & to make buying priority list.

### 2.3 Summary of literature sources.

**Table 1 - Dimensions of apparel product quality based on literature review**

Component	describe / meaning	literature sources.
Performance	Functionality; meeting the expectation; comforts; hand feel; Fabric quality & tailor ability; accessories Usability; keep cool, comfortable and dry using moisture management and other techniques;	Fashion Marketing, 2016; Sweta & Lawrance (2015); Kevin (2001); Keller (2001); Garvin (1987); Churchill and Surprenant (1982); Little, (2016)
Features	Prominent attribute; Function of closures, buttons, zippers and other accessories; right look; well-fitting; trendy; Reasonable Pricing; stylizing with adding collars, hoods, pockets, bands, ruffles, cuffs, Comfort / hand feeling, lighter weight;	Stroud,(2018); Dale et al (2017); Sweta & Lawrance (2015); Gaurav, 2013; Popescu & Etzioni 2007; Jones (2005);Kuan & Ruby (2003); Yelkur (2000); Stephen & Simonson, (1996); Simonson. Carmon & Suzanne, (1994);
Reliability	Being trustworthy; performing consistently well; warranties for wearable; good quality assurance;	Pachl,(2015) ;Langley, Durkacz, and Tanase, (2013);David (2008); Walker et al., (2000); Garvin ( 1987); Wiener (1985);
Conformance	Accurate measurements; best fitting; timeliness on delivery; emotional comfort; standards; lesser counts of processing mistakes; zero unexpected interruptions; zero self-fabric tearing & stitch broken; no frequent mistakes on sewing;	Fields et al,(2014); Langley, Durkacz, and Tanase, (2013);Jones (2005); Keller (2001); Reeves & Bednar (1994); Nakane, (1986);
Aesthetics	Looks; feels, sounds, tastes; smells; contortions and reshaping through foundation garments; padding and binding; fashionable silhouette; stylish clothes;	Jones (2005); Parker, Hermans & Schaefer, (2004); Crosby (1979) Garvin (1987);

	preference to trendiness; goodness, luxury, shininess; Suitable weight for wear;	
Durability	Withstand longer wearing; pressure absorbing; less damage; credibility awareness; fit; longer lasting clothes; reuse and recycling practices	McLaren et al (2015); Keller (2001), Laura,(1996); David & Yoram, (1973); Oliver, (1836);
Serviceability	Safe; legal; wearing well; easy worn, clean; repaired easily. fast service & responding to end customer	1. <a href="https://marksandspencer.com">https://marksandspencer.com</a> , Dale et al (2017) ; Walker et al.,( 2000); Garvin, (1987); U.S. Department of Commerce, (1979)
Perceived quality	Witness of consumer decision- making; environment and user-friendliness; Packaging and labelling, branding,	Dale et al (2017); Dumasi, Dhurup & Mafini (2014); Nasir et al , (2012); Ha et al ., (2011); Jones (2005): Zeithaml, (1988); Rowley, (1998) ; (Sherrie & Brian, (1997); Parasuraman, et al., ( 1994). Sandra (1991),

## **CHAPTER 3: METHODOLOGY**

### **3 Introduction to chapter**

In this Chapter researcher describes the methodology researcher uses, the reason for selecting the methodology, and why it was suitable for this study. The Conceptual framework for the study is discussed. The sampling design, data collection procedures, data analysis were discussed.

Conceptual Background (figure 1), describe a summary of literature review which researcher has implemented to demonstrate the relationship between the elements affecting the customer satisfaction base on the study. The study investigates the impact of these tools in terms of customer's satisfaction level. A questionnaire analyses using MS Excel, will have evaluate the outcome of the collected date.

In this study (Figure 1) researcher used a conceptual framework, which build using the element of product quality (supported by relevant literature) to support the qualitative research. In this conceptual framework, independent variables will be "products quality" measured by 8 of other parameters, discovered by a questionnaire to verify the relationship to dependent variable "customer satisfaction". A self-administrated questionnaire (Appendix 1) was used to collect primary data to measure the relationship between product & service quality and customer satisfaction. By testing the relationships of the dependent variables of retailer shops, researcher will measure the customer satisfaction level.

To analyze the customer satisfaction level, Multiple questions were used to identify responses from each respondent. Collected data were sorted, edited and classified. An analysis of mean value and stranded deviation was used to find out the relationship between product quality and customer satisfaction.

Customer satisfaction levels examined at each of the element evaluations to prove the possible correlation or similar relation between phenomena was investigate. (Refer 5.4 Scope for further research).

Researcher has used "Zotero" Citation Machine & APA (American Psychological Association) style was used for citations and referencing in the study. Each work referred to within the body of research writing was given an in-text reference and an entry in the reference list at the end of the document for any clarification or for the future study.

### **3.1 Conceptual Background**

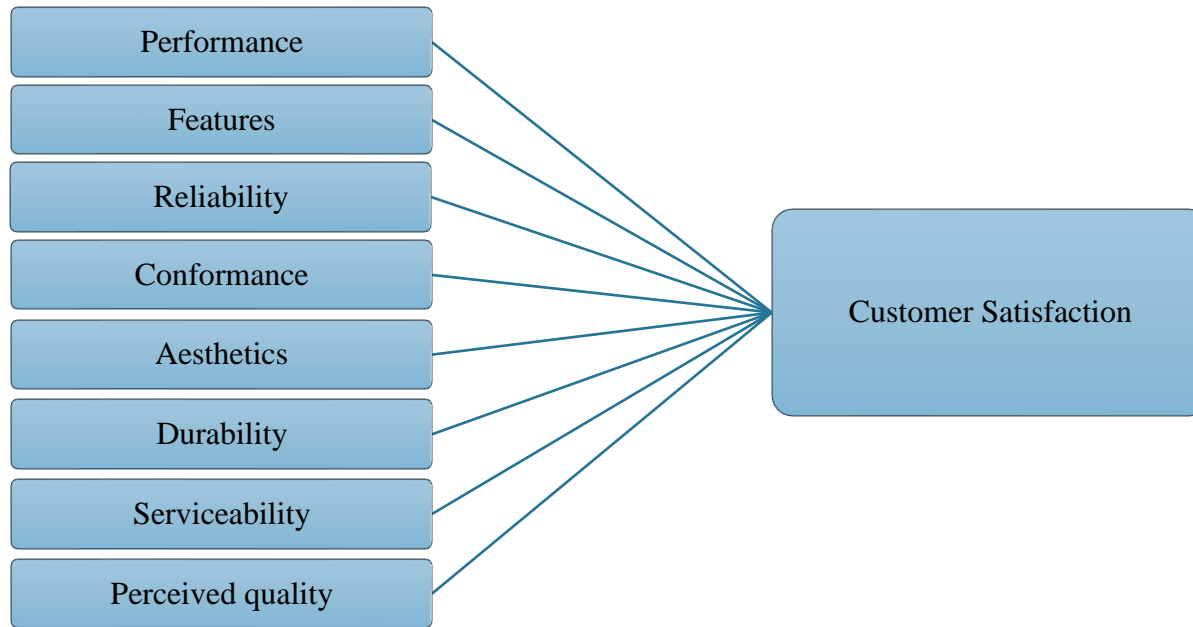
There will be many studies carried out to demonstrate the relationship between customer satisfaction and the product quality. Colin (2002) had discussed to understand of the relationship among related concepts for customer satisfaction, as well as the effects of the concepts on consumer behavior (Cronin, Brady & Hult 2000). Researcher focus on customer satisfactions in this study & literature reading had link between consumer satisfaction & product quality.

The current study is to evaluate the consumer satisfaction as the function of products quality. And consumer satisfaction is measured by consumer's overall decision.

Garvin (1987), proposes eight critical dimensions or categories of product quality that can serve as a framework for strategic analysis. Researcher has implemented a Conceptual framework base on these as to what demonstrate the relationship among these tools of affecting the customer satisfaction.

The Conceptual framework is for measure the effect of customer satisfaction by evaluating product quality dimensions.





**Figure 1 - Conceptual framework**

## **3.2 Method of Sampling**

According to Field (2005), a sample is a smaller but hopefully representative collection of units from a population used to determine truth about that population. A “good” sample is one that is representative of the population from which it was selected. Samples were used for the essence of saving time and money also to reduce work load.

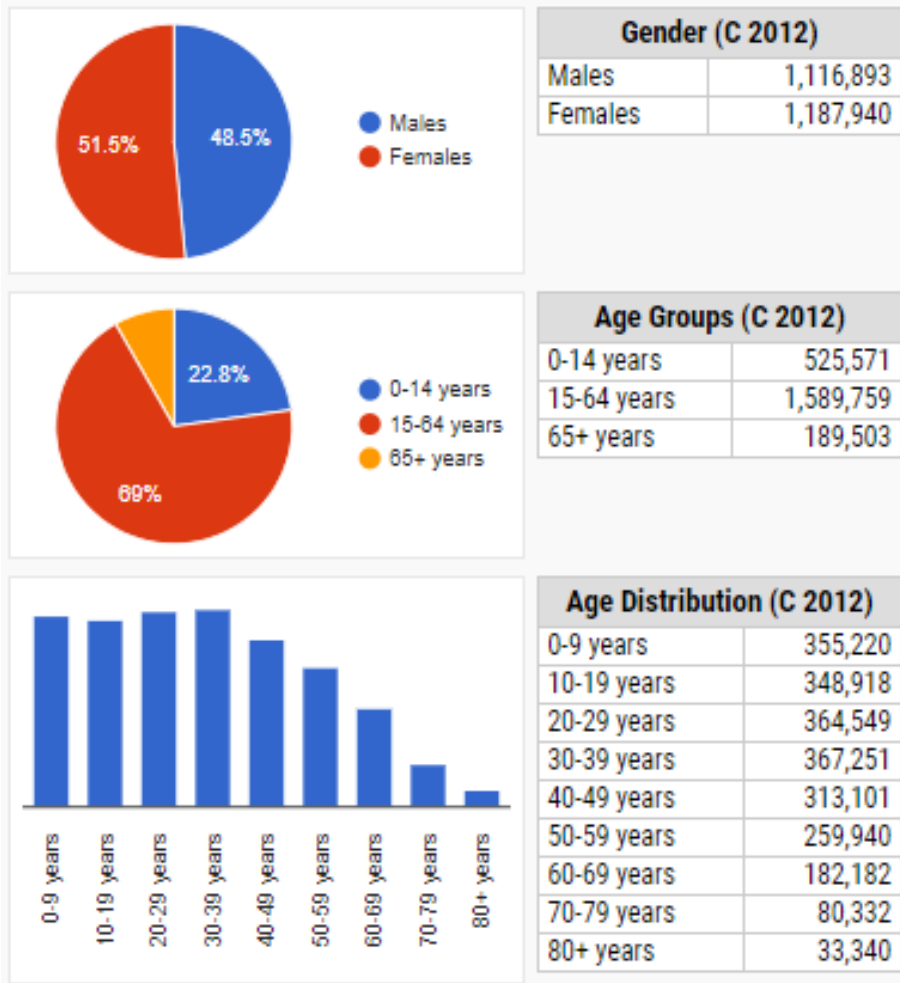
Random sampling technique is one of the well-known of the probability method. This method asserts that every person or member of the population under study has equal chances of being chosen or the same probability of selection. In selecting a sample in the simple random technique, the research should assign a number starting from 1 to the expected total sample number. The researcher had taken 200 customers as the sample size and had a responsive rate of 143 customers (71%). And only women were selected & given the questionnaire as research literature finding says women’s buy more than men in apparel product (Emine & Koc, 2016).

The Age group of the sample will be around 25 to 45. Sri Lanka hosted a dynamic age structure that includes a very large age bracket of 25-54-year-old individuals dominating the country. Around 42.6% of the population lies in that age bracket. (statistics.gov, 2017).

### **3.2.1 Geographical location selection**

Gampaha District is one of the 25 districts of Sri Lanka, the second level administrative division of the country. It is the second most populous district of Sri Lanka after Colombo District. Thus, researcher will take the city area of Gampaha to conduct the research to chapter more customers to cover the population. Gampaha, had become second highest per capita incomes nationwide, with Gampaha Development Company moving forward on the OREX City and Ward City developments (oxford business group ,2018).

### Population Figures:



**Figure 2 Gampaha District population details**  
**Source: Department of Census and Statistics, Sri Lanka (web).**

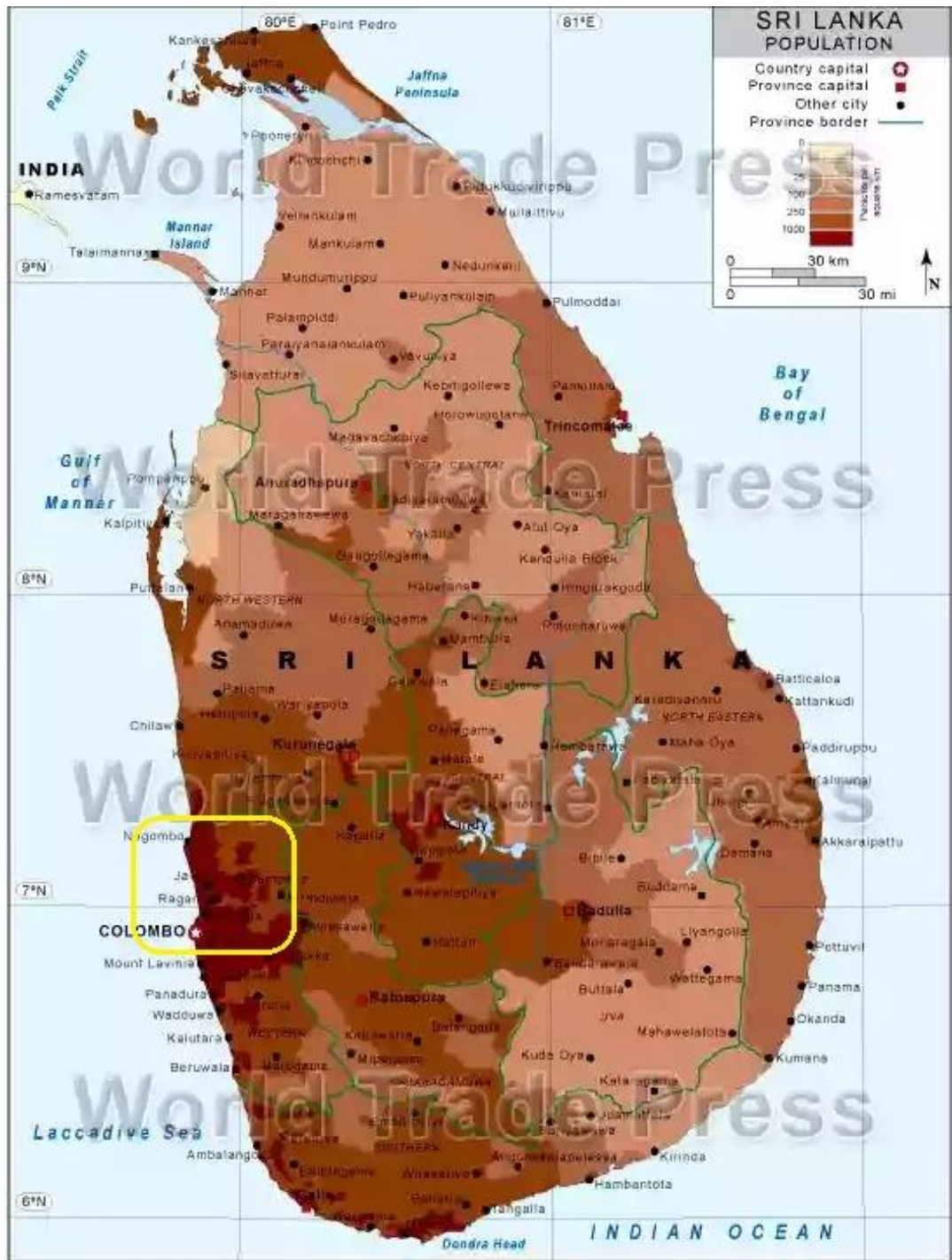
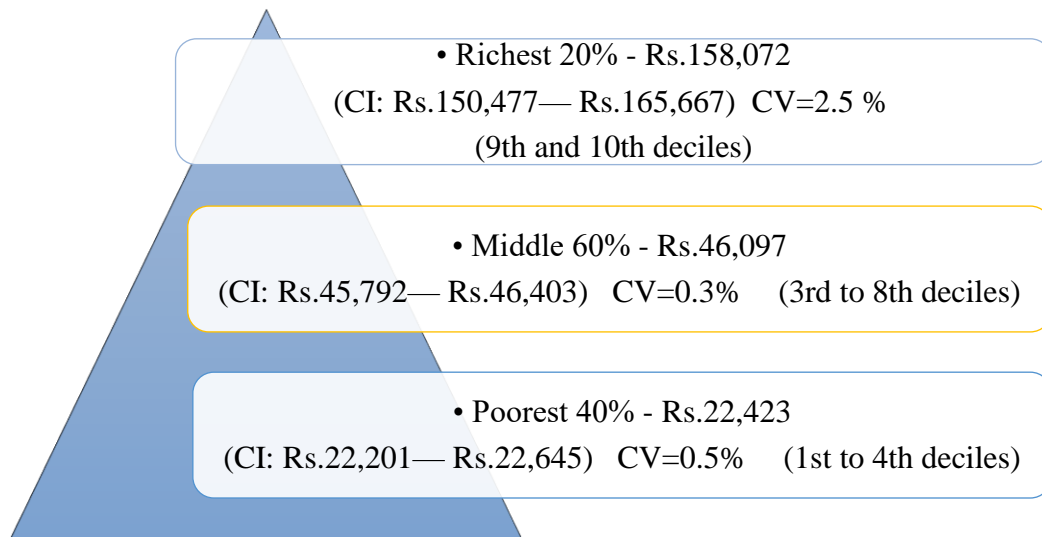


Figure 3 – Sri Lanka Population map – source [www.worldtradepress.com](http://www.worldtradepress.com)

### 3.2.2 Identification of market level and respective apparel retailers

Based on Appendix 4, below retailer shops were selected as retailer shops for the middle-income customers of Sri Lanka. The product pricing range was taken as the measure to identify the respective apparel retailers that sell women's casualwear products targeting middle market level consumers. Middle market level is understood by the average income level of the consumer.



**Figure 4 – Average monthly household income by socio economic groups.**  
**Source - Department of Census and Statistics – October 2017.**

### 3.2.3 Identification of middle-income market

Fashion marketing pyramid which represents the market levels of fashion industry supports this argument, highlighting the fact that upper income level consumers buy clothing from upper market levels, while middle income level consumers buy products from middle market level (Udale & Sorger, 2007).



**Figure 5 – Fashion industry pyramid.**

Source - compiled by the researcher from Sorger and Udale (2006)

Price is a pivotal quality indicator in situations where other parameters do not play a significant role, McConnell (1968). And most of the retailers looks like to be using lower pricing products to attract the middle-income level customers, (Shahid ,2011). But price is not a benchmark for the products of luxury / design wear and trendy wear, (Sernghaus, 2002).

Name of Retailer Shop	Lower price to Upper price In casual wear products
Spring and summer	200Rs. to 3000Rs.
Fashion Bug	500Rs. To 5000Rs.
Cool planet	90Rs. to 3000Rs
Glitz	90Rs. to 3000Rs
Nolimit	90Rs. to 3000Rs
Factory outlet	600Rs. to 2000Rs,
Thilakawardhana Textile	500Rs. To 5000Rs.

**Table 2 – Casual ware price range of the selected retailer shops**

### **3.2.4 Identification of consumers**

Random sampling technique, one of the well-known of the probability method, was used to identify the respondents to the survey. This method asserts that every person or member of the population under study has equal chances of being chosen or the same probability of selection. In selecting a sample in the simple random technique, the research should assign a number starting from 1 to the expected total sample number. The researcher had taken 200 customers as the sample size and had a responsive rate of 143 customers (71%). And only women were selected & given the questionnaire as research literature finding says women's buy more than men with relation to apparel products (Emine & Koc, 2016). The sample of consumers should satisfy the following criteria, the person should be a woman who visits the selected store to buy casual wear clothing and also who satisfies the medium level income level.

### **3.2.5 Sample Design & selection**

Robson (2002) demands, to have the ideas, come from own experience of everyday life and personal values of a customer, to have the "real world research". The survey was done with the use of face to face method in collecting the information, where researcher of this study met the actual customers of the retailer shops, and thus the survey processed as the best method to gather the information of customers. In practice, the researcher collected the data by distributing the questionnaires to the respondents in the sample and then required them to answer in a permitted time due to time limited time and financial issue of the researcher.

## **3.3 Questionnaire Design and Measurements**

Leonard (2007) demanded for self-administered questionnaire to form and to have genuine outcome of a research. He mentioned the questions needs to be written in a clear, straightforward style, an easy-to-understand to the readers were necessary. The questionnaire used for this study was written in simple English and necessary translations given while collecting the data. And the questions were very simple and had 15 questions to get the data of the satisfaction related to the offering of the apparel retailers.

The questionnaire contains two sections. First section was for the customer information collections to evaluate the real customer of the selected retailer shops. This is yet again evaluated the sample set was correctly representing the focus group. Accordingly, questions were inserted to identify the income level and the consumer's choice of retailers for casualwear. Further age was also added as this was a critical

dimension that affect the level of customer satisfaction. Researcher had made seven questions in this section.

The second section was about the perception of product quality base of customers satisfaction. For this section researcher has used the finding of the literature review on same subjects and the dimensions which explain. And for product quality was assessed using eight dimensions, performance, Features, Reliability, Conformance, Aesthetics, Durability, serviceability and perceived quality. Researcher had made 15 questions to measure these 8 dimensions.

Likert scale is a psychometric response scale primarily used in questionnaires to obtain participant’s preferences or degree of agreement with a statement or set of statements. 5-point scale ranging from “Strongly Disagree” on one end to “Strongly Agree” on the other with “Neither Agree nor Disagree” in the middle were the most commonly seen. In this study researcher used 4-point (or other even-numbered) Likert scale to produce an impasse (forced choice) measure, (Bertram, 1932). Likert scale rating Strongly Agree (1) Agree (2) Disagree (3) Strongly Disagreed (4) to answer the second part as shown in the questionnaire. Customers who select “Agree (1)” were count as “very satisfied” customers and those who select “Agree (2)” will be identify as “somewhat satisfied customers”. The customer group who select “Disagree (3)” will identify as customers who were “somewhat unsatisfied”. Those customers who select “Strongly Disagreed (4)” will be in “very unsatisfied” customers category.

FurtherMann-Whitney U Test data analyze is been used to give a brief mathematical introduction of the research data analysis. Test data will be created and analyzing using the software and mathematical results evaluation will be expressed. U value structuring will be generate using values (N) and ranks.

**Table 3 – Questionnaire formation with key dimension and sub criteria**

Key dimension	Sub Criteria	Related Question
Performance	Functionality; meeting the expectation;	Question number 01
	comforts; hand feel; Fabric quality & tailor ability; accessories Usability; keep cool, comfortable and dry using moisture management and other techniques;	Question number 15
Features	value of right look, well-fitting, trendy, Reasonable Pricing. comfort and trendiness	Question number 08
	good Features stylize with added to the clothing like collars, hoods, pockets, bands, ruffles, cuffs / Comfort is always met.	Question number 09



Reliability	give a warranty for garment application & finishers, faster respond to customer,	Question number 07
	longer lasting clothes.	Question number 14
Conformance	Ensure Material & accessories Safety, labels and tags are carefully designed	Question number 10
	Zero self-fabric tearing, stitch broken, Zero defect or processing mistakes, good capacity of products,	Question number 11
Aesthetics	softer hand feel, rich look, feels, sounds, tastes, fashionable clothing, has accessories	Question number 03
	different looks, designs, Techniques which change appearance, different colours,	Question number 04
Durability	longer wearing, gives pressure, zero damages	Question number 02
	trust on care labels, warranties are met, longer lasting clothes,	Question number 12
Serviceability	fast-changing trends, ability of recommend the retailer, repaired easily and wearing well, pay more for the value created.	Question number 06
	overall finishing is safely made, proper protection & legal standards met.	Question number 13
Perceived quality	Protect environment, user-friendliness, clear Packaging and labelling, availability of brands	Question number 05

### 3.4 Data Analysis

The questionnaire was analyzed as same as they were made, part 1 and Part 2. Part one was the customer identification data collection. The details have collected base on customers age income level and also their choice of retailers for casualwear. researcher also added an option of residence area to realize if the customer was out of the sampling population.

The Second part analyzed to grasp the outcome of the variables describe

The data was in put to MS Excel spread sheet (Appendix 3) to find out the maximum and minimum levels, sample standard deviation, variance & mean. And analyzed the mean and Stranded deviation of the customer satisfaction level of customers participated for the questionnaire data collection. MS Excel software was used to generate the graphic displays of data too.

Researcher will use Mann-Whitney U Test to see the correlation of the satisfied group and the group of un satisfied. The Z scores (i.e., the value of N) and the Ranks will be performed by assumed sampling distribution as approximately normal.

## CHAPTER 4: RESULTS AND DISCUSSION

### 4 Introduction to chapter

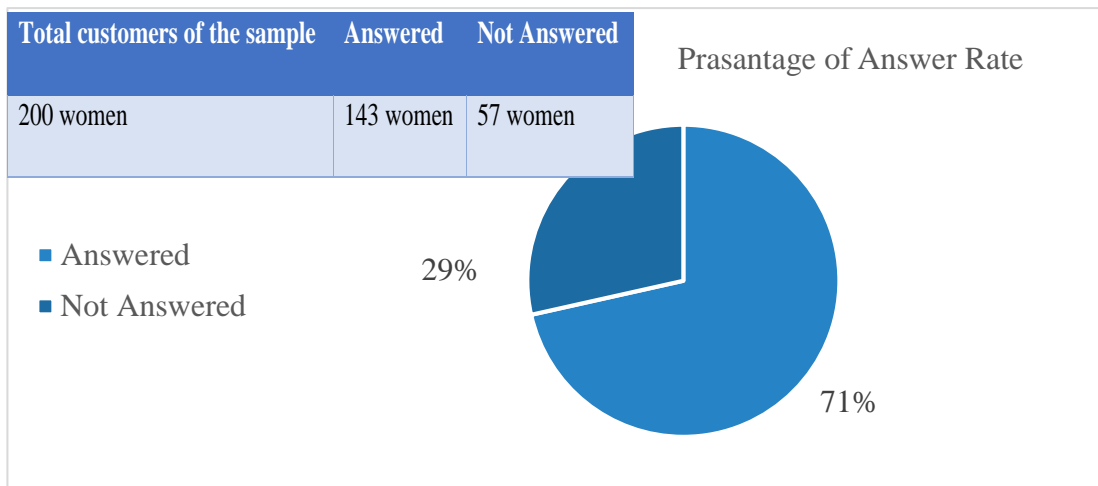
In section researcher discussed the results of the collected data. The data analyzed, and the variation of the collected data was measured considering mean values and the stranded deviation. These will be calculated by MS Excel work sheets and graphically display the data in the analyzing part.

The results were being revealed the answers of the questionnaire will be analyzing using MS Excel worksheets analyzing tool (refer 1.3 - Reference for calculation) and will get the answers to display the results were true or falls.

#### 4.1 Data Analyzing

##### 4.1.1 Percentage of Answer Rate

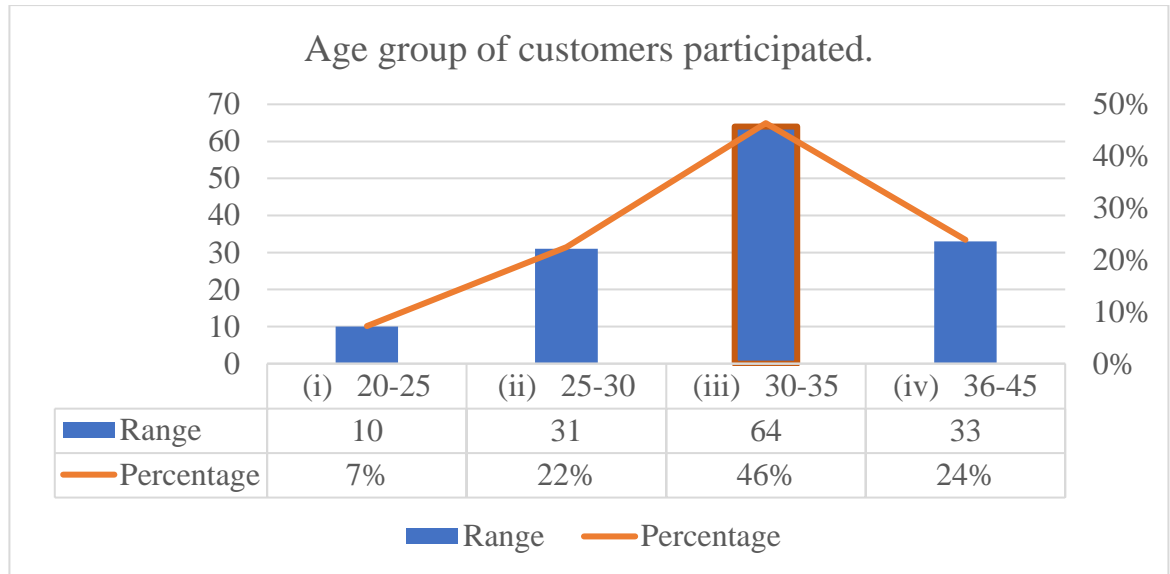
The questionnaire papers were sent to them via Emails. But later due to very late and non-responding rates, the questionnaire was taken to the direct customers and collected on the same time in year 2018. The samples of women who actively engaged in the questionnaire was 143 customers & its 71% of the total sample. It was a worthy answer rare, for a successful analyzing.



**Figure 6 – Details of the answer rare of the questionnaire.**

#### 4.1.2 Age Group.

The research sampling of the age group is identical to the sample identified in the Methodology. Research finding in figure no 3, demonstrated, population correctly reflected in the sample. Figure 7 shows the sampling is match to the population



**Figure 7- Details of the Age group of customers participated.**

The age group who had the high buying power was less than 20 age group were schooling. Department of Census and Statistics's (2017), results showed, an average monthly household expenditure for Clothing, Textiles & Foot wear has gone up by 4.4 % for last 4 years,

The research questionnaire had given to 200 customers and the answers were given by 143 customers 72%. But we need to remove the non-matched customers to the population. And to carry out the research with 125 customers. These customers will be considered as the sample. As revealed by Figure 7 ,70% of the casual wear customers was from 30-45 years of age and study had 46% of 30-35years of age group. The 30% balance was below 30years and had 7% age group from 20-25 years.

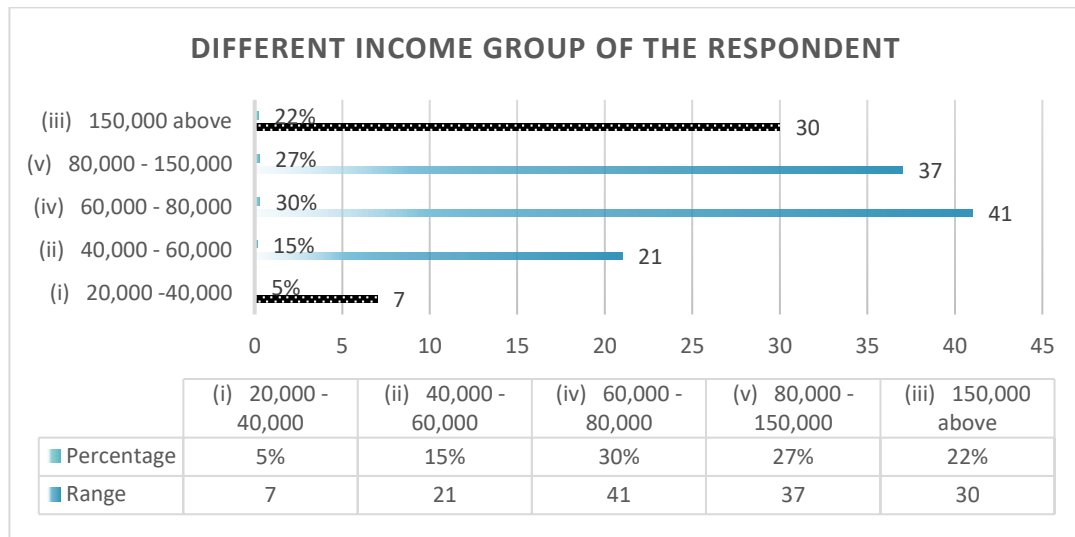
### 4.1.3 Income level of the sample

The study was focused to have a statistical data and a clear evaluation as to display the level of customer satisfaction in women’s Casual wear garments retailing in Sri Lanka. To have a better scope researcher had taken the customer group of income levels of 40 000 Rs. To 100 000 Rs. Selected income sector identifies as the Middle-income population in Sri Lanka and they were 60% of the total population, (Department of Census and Statistics – October 2017).

The Income level per month of the selected customers were 79% who earns more than 60 000Rs and 22% of the customers were earning more than 100 000Rs. Research finding shows only 21% of the customers who earn less than 40000rs and 5% who get less than 20 000 was the collected data base. Please refer Appendix 3: details of the participance (responded) of data collection.

Customers who has less than 40 000Rs, income will not be taken to the analyzing as these customers were not fall under middle income population.

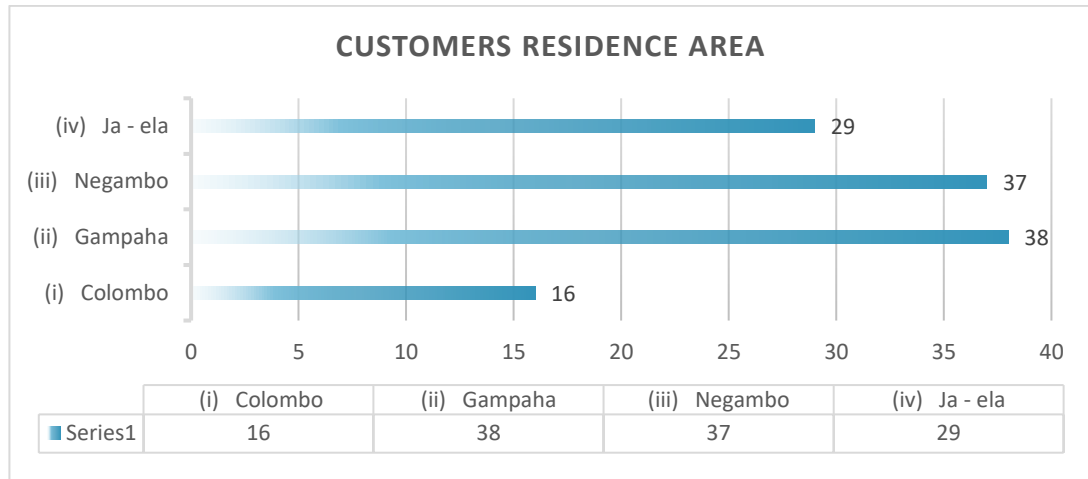
And also, the customers who has more than 150,000 Rs has will not be taken to the analyzing reason is customers who earn more than 15000 is not fall under middle income population.



**Figure 8 – Customers Income level per month (LK RS)**

#### 4.1.4 Customers Residence area of the sample

As mentioned in methodology, the team of customers were selected from Negombo, Gampaha to Colombo area and Ja-Ela, Waththala area has 36% of the customers and has only 16% team from Colombo. The questionnaire distribution was in Ja-Ela and Negombo and It was noticed 27% of the Gampaha customers were found at the range. This demographic profile showed the structure of population which match to a true sampling population with the population map given by the Sri lanka Government. Figure 9 shows the sampling is match to the population

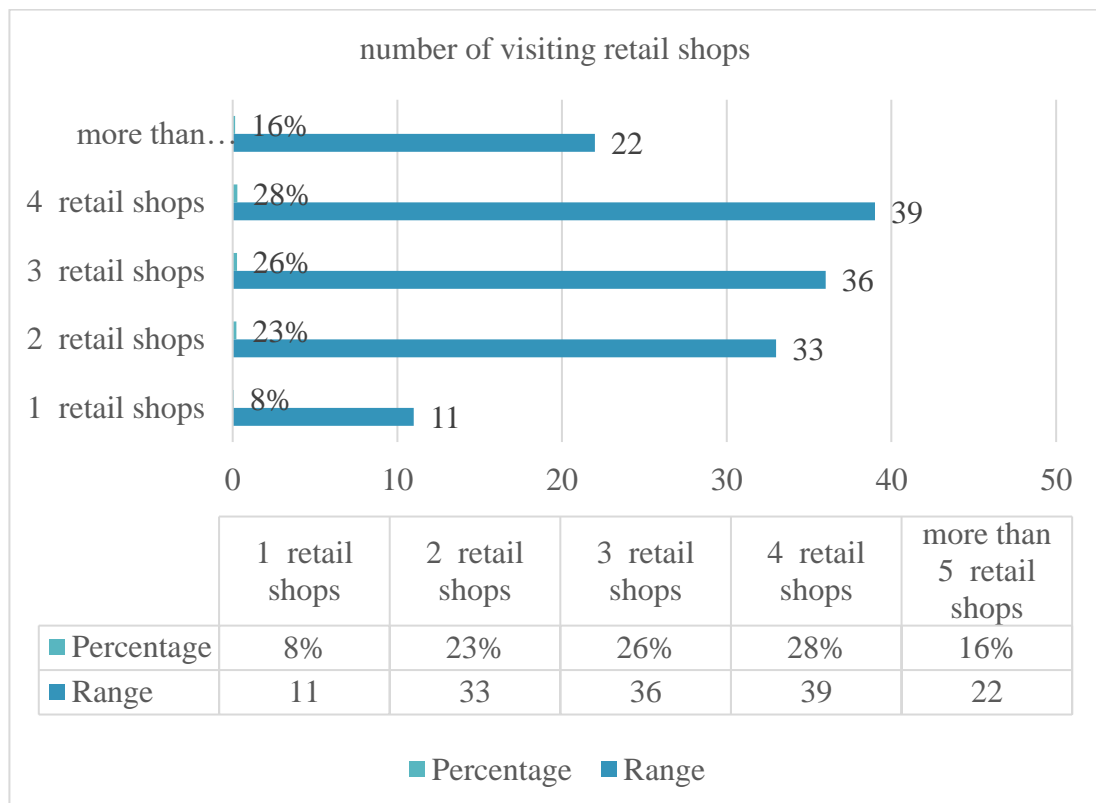


**Figure 9 – Evaluation of customers Residence area.**

#### 4.1.5 Number of visiting retail shops of customers.

An active customer of a retailer group should always actively move with the retailer's products. This research was about the Casual wear products available in Sri Lanka and the questionnaire findings demonstrate there was 11 people out of 143 people (8%) was move with one retailer shop. And there were 23% team who visits 2 retailers and research had 26% of them who move with 3 retailers. Further the database had 28% of the customers who visited 4 out of 6 retailers. 22 customers which was 16% of the teams were interested with shopping using more than 5 retailer shops.

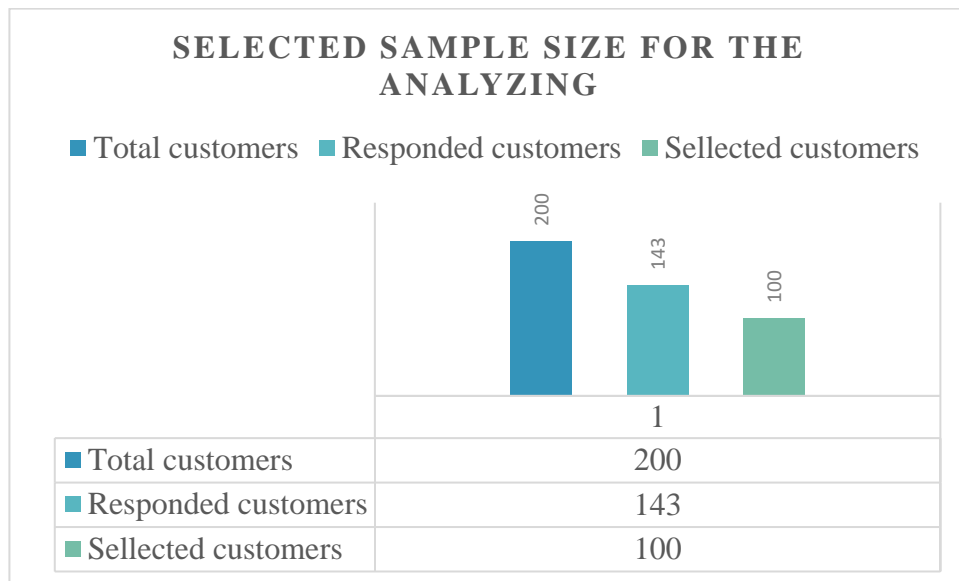
Customers who visited only a one retailer shop will be unconcerned at the time of data evaluation. These customers do not reflect the population. But researcher observed Once the lowest (7 customers) and highest income group (30 customers) are removed the group of customers who visits these shops only one time is also moving out. (11 customers).



**Figure 10 – Number of visiting retail shops of customers.**

#### 4.1.6 Selected Sample size for the analyzing.

Selected group was 200 customers for the evaluation, but the answer rate is 143 (72%) customers. Out of these customers we need to squeeze the sample which is validate the population. Thus, the sample group select will be 100 customers who reflect the population of casualwear customers. Accordingly, the sample of customers who are in the age range of 25-45 and in the middle-income group of Rs.40,000 to Rs.150,000/= located in Gampaha district, that buys their casualwear clothing more than one store was selected for further data analysis to measure the level of customer satisfaction.



**Figure 11 – Selected Sample size based on predefined exclude and include criteria**



## 4.2 Product quality satisfaction for product quality

**Table 4 - Table of analyzing tools and measurements**

Measures	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Average
Not answered	0	0	0	3	5	8	6	11	16	4	7	6	6	4	13	6
Answered	100	100	100	97	95	92	94	89	84	96	93	94	94	96	87	94
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Percentage	100%	100%	100%	97%	95%	92%	94%	89%	84%	96%	93%	94%	94%	96%	87%	94%
Standard deviation	0.73	0.64	0.93	0.92	0.82	0.74	0.84	0.98	0.87	0.78	0.84	1.02	0.83	0.92	0.79	0.84
Variance	0.53	0.41	0.86	0.84	0.67	0.54	0.70	0.96	0.75	0.61	0.71	1.04	0.68	0.85	0.63	0.72
Mean	1.76	1.48	1.81	2.73	1.77	2.01	2.01	2.54	2.14	2.03	2.20	2.22	2.06	2.03	1.90	2.05

#### **4.2.1 Level of customer satisfaction for performance**

The study of customer satisfaction has focused on product quality satisfaction levels with 15 questions & Service qualities was assessed using findings of quality definitions in literature review.

The first question was if the Customer had been satisfied with the performance of the garment if its only fulfils primary operating characteristic on the product. Research had 84% agreement of the Question one, which was on primary characteristic of the product quality. As Kevin (2001) highlighted Product reliability, durability, and serviceability will be customers concern when she marked the questionnaire. Study shows 16% of was not satisfied, but the agreed were much higher. The Variance was above 0.53 and the standard deviation stands 0.73. positive answering was 83 (84%) customers and only 16 (16%) was negative. (Appendix 3)

The question of number 15th is again about the performance properties of the garment quality base on the criteria of fabric quality & tailor ability. 13% of ignoring rate is absorbed in this point which is 13 customers. The results may be because customers had not observed performance quality or perhaps they do not expect to have performance quality expects in casualwear sector.

With associating the question number 1<sup>st</sup> and 15<sup>th</sup>, the customers are shown satisfaction for the both questions & thus notify the customers are satisfied with the performance of product of casual wear clothing.

#### **4.2.2 Level of customer satisfaction for Aesthetics**

Questions 3 & 4 was based on Aesthetics characteristic of the quality. As Rostami (2001) the purchasing activities was imminent with trendy fashion & a nice hand feel on clothing and fabric. The customer satisfaction on these quality factors shown with the results of 83%, which provide positive answers, for question 03. In the study 17% of negative answers were found too. And the mean value was 1.81. which also at the agreed level. the variance was 0.86 and standard deviation of the mean was demonstrating 0.93 of a confidence level.

But when it comes to question 4, study reflect 56% of the negative answers, which speaks customer had not satisfied with the retailer offering base on criteria of products with washing treatments like coloring and dying which used to make different looks and designs like buckets dyes, Tie-Dyes using different options, Wax Batik Techniques, Watercolor Techniques. So, the retailers should have an attention to this point when they offer the garments. These answer which again proved the customer product quality has a positive impact on the customer satisfaction. Figure 13 displays question 4 has revealed the second highest disagreed level. (Appendix 2)

With associating the question number 3<sup>rd</sup> and 4<sup>th</sup>, the customers are shown satisfaction for the question 03 when they had shown a negative answer rate for question 04. Question no 4 was a significant question to see those customers who have shown a high number of dissatisfaction for having products with washing treatments like coloring and dyeing which used to make different looks and designs like bucket dyes, Tie-Dyes using different options, Wax Batik Techniques, Watercolor Techniques were customers who had not been seen in store Purchase teams. The Gap of negative satisfaction is clearly highlighted.

The sample group was 97 customers and this quiz has high negative rates of most of the retailers who were only visiting the in-store shops too. Accordingly, this was still important as most of the selected retailer shops had an online store, retailers should not ignore the responses. The group who negatively responded were from the income levels of 40,000 to 80,000 Rs, which means they are likely to have more buying power. Further, these customers are the team of customers who visit retailer shops more than 2 times. Please see the filter tables of the total group of people who have replied with the disappointment of the Aesthetics in the retailer shops. By assessing the geographical area most of these customers are from Gampaha and Wattala. And the Age group is mainly from 25 to 35 years old women are falls in the category of dissatisfaction. (Appendix 2)

**Table 5 - Level of dissatisfied customers for Aesthetics**

<b>A. Age</b>					
	(i) 20-25	(ii) 25-30	(iii) 30-35	(iv) 36-45	
Range	4	13	15	9	
Percentage	10%	32%	37%	22%	
<b>B. Income level per month (LK RS)</b>					
	(i) 20,000 -40,000	(ii) 40,000 - 60,000	(iv) 60,000 - 80,000	(v) 80,000 - 150,000	(iii) 150,000 above
Range	0	8	17	13	0
Percentage	0%	21%	45%	34%	0%
<b>C. Residence area</b>					
	(i) Colombo	(ii) Gampaha	(iii) Negambo	(iv) Ja - ela	(v) Waththala
Range	6	12	7	5	12

Percentage	14%	29%	17%	12%	29%
<b>G (D) What are the retail shops that you frequently visit?</b>					
	1 retail shops	2 retail shops	3 retail shops	4 retail shops	more than 5 retail shops
Range	0	14	15	13	0
Percentage	0%	33%	36%	31%	0%

### 4.2.3 Level of customer satisfaction for Features

Question 8 was for understand customer satisfaction of comfort & trendiness as a Feature of the quality. Comfort & trendiness was one of the keep quality when it comes to apparel. As Jones (2005) describe hand feeling, lighter weight was come with the comfort. Above 89% replied to the questions and the not answers customers were less than 17 out of 100 of answer papers. The answer results display a mean value 2.54, which indicate customers were closer to give the answer of disagreed to these points.

Question 9 was again for Features analyzing. 74% of customers has said the products in the retailing apparel market is with good Features, stylize with added to the clothing like collars, hoods, pockets, bands, ruffles, cuffs. Customers confirmed Comfort is always met and the standard deviation is state at 0.87 value and the mean is at 2.18. which proved and felled in a level of “agreed/ satisfied”.

The question 8 was the direct question of observe comfort & trendiness in the retailer shops, standard deviation value of .98 to this point where researcher couldn't justify retailer shops had offered casualwear garments with comfort & trendiness. Figure 3 displayed question 4 has revealed the second highest disagreed level was for question 08. Since customers had demanded stylish clothes to purchase a cart of cloths but the same had not been agreed to comfort and trendiness. Retailors to have to work on meeting the customers satisfaction. The emotional comforts which may have play a bigger roll to mention “disagreed “in question 8th. Retailers today in Casual wear sector has fails to offer what customers really needs. Figure 12 was illustrated via a column chart, the level of customer satisfaction on 4 colors to easy understanding of the research finding under Product quality vs customer satisfaction.

With associating the question number 8<sup>th</sup> and 9<sup>th</sup>, the customers are shown satisfaction for the question 09 whey they had shown a negative answer rate for question 08. The difference the products of right look, well-fitting, trendy and also reasonable pricing. The Gap of negative satisfaction is clearly highlighted.

The customers who are negatively reply are in a category of a group who felt in the income levels of above 60000 Rs to 80 000Rs. (Table 6), which means they likely to have more buying power. Further, these customers were loyal buyers who were visiting the shops more than 2-4 times. The Age group of the unsatisfied group is 30-35 in the majority number. This is the age group who has more buying power. The retailers today need to address to these customers to maximize the market share. By assessing the geographical area most of these customers are from Gampaha. Which is the second largest population is living.

**Table 6 - Level of customer satisfaction for Features**

<b>A. Age</b>					
	(i) 20-25	(ii) 25-30	(iii) 30-35	(iv) 36-45	
Range	2	10	18	7	
Percentage	5%	27%	49%	19%	
<b>B. Income level per month (LK RS)</b>					
	(i) 20,000 - 40,000	(ii) 40,000 – 60,000	(iv) 60,000 – 80,000	(v) 80,000 – 150,000	(iii) 150,000 above
Range	0	5	19	13	0
Percentage	0%	14%	51%	35%	0%
<b>C. Residence area</b>					
	(i) Colombo	(ii) Gampaha	(iii) Negambo	(iv) Ja - ela	(v) Waththala
Range	2	13	9	5	8
Percentage	5%	35%	24%	14%	22%

<b>G (D) What are the retail shops that you frequently visit?</b>					
	1 retail shops	2 retail shops	3 retail shops	4 retail shops	more than 5 retail shops
Range	0	10	12	11	4
Percentage	0%	27%	32%	30%	11%



#### 4.2.4 Level of dissatisfied customers for Durability

92 customers raised hand for a positive answer for customer satisfaction on question two. 98% of the customers of casual wear cloths has agreed to say they had been offered a clothing with durability. But the variance of the sample was 0.41 for the mean value of 1.48, which was closer to the answer of Agree. which state “even those the answer was satisfied, that doesn’t mean the customer was full satisfied with the available offering. The retailer has a product gap here. The customer today is more concern about the durability (Kevin, 2001), (Garvin, 1983), (Barrie, Dale & Plunkett, 2017), (Langley, Durkacz, and Tanase 2013). (Table 7)

Quotation 12 was a direct question about the durability. Results have 39% of negatively rated the quality base founding pilling, fading or defect of the product after wearing 10-15 times. It’s a major quality issue. But the research was about the retailing shops (in store) and again results show, out of 94 total customers, 37 customers are un happy and unsatisfied with the casual wear offering which is available in the Sri Lanka retailer shops. We have a mean value of 2.22 to the sample which shows the customers positive satisfaction level.

With associating the question number 2<sup>nd</sup> and 12<sup>th</sup>, the customers are shown satisfaction for the question 02 whey they had shown a negative answer rate for question 12. The difference is the care labels verification and washing durability. The Gap of negative satisfaction is clearly highlighted. Question number 2 is with 1.48 satisfaction level which is high satisfaction which says the offering of the market are match to the expectation of the customers,

The group who negatively respond had fallen in the income levels of 60 000 to 150 000 Rs, which means they likely to have more buying power. Further, these customers were loyal buyers who were visiting the shops more than 3 times. (Table 7) The Age group of the unsatisfied group is 25-35 in the majority number. This is the age group who has more buying power. By assessing the geographical area most of these customers are from Negombo and Gampaha, Wattala. Which is in the highest population living area.

**Table 07 - Level of customer satisfaction for Durability**

<b>A. Age</b>					
	(i) 20-25	(ii) 25-30	(iii) 30-35	(iv) 36-45	
Range	2	12	12	8	
Percentage	6%	35%	35%	24%	
<b>B. Income level per month (LK RS)</b>					
	(i) 20,000 - 40,000	(ii) 40,000 – 60,000	(iv) 60,000 – 80,000	(v) 80,000 – 150,000	(iii) 150,000 above
Range	0	7	17	10	0
Percentage	0%	21%	50%	29%	0%

<b>C. Residence area</b>					
	(i) Colombo	(ii) Gampaha	(iii) Negambo	(iv) Ja - ela	(v) Waththala
Range	6	7	9	5	7
Percentage	18%	21%	26%	15%	21%
<b>G (D) What are the retail shops that you frequently visit?</b>					
	1 retail shops	2 retail shops	3 retail shops	4 retail shops	more than 5 retail shops
Range	0	10	10	6	8
Percentage	0%	29%	29%	18%	24%

#### **4.2.5 Level of dissatisfied customers for reliability**

Question 7 was to understand customer satisfaction of continually performed as a reliability fact of the quality. Trust on the garment quality and how far a customer can be dependable of retailer's warranty was one of the keep quality when it comes to apparel. Above 94% replied to the questions and the not answers customers were only six customers. Out of 100 of answer papers the answer results display a mean value of 2.01 which is satisfaction and stranded deviation is 0.84, which indicate customers are positive on the quality of the products offered. (Table 7)

Question 14 was based on Fit as todays customer was concerns of here body to have fitted garment (Jones, 2005). If the garments are fits well that can be wear for a longer period. And customer could depend on fit meets clothes from same retailer. Data collection had 96% of answer rate and 75% of the customers has agreed on the statement of retailer shops have Casual wear cloths has garments with best fit. Total of 24 (25%) customers has strongly agreed to the statement and stranded deviation value was 0.92 with a mean value of 2.03. Which was Agreed to the statement.

With analyzing both questions, it presented the middle-income customers are satisfied with reliability of the quality, based on products offering delivered by casual wear retailer shops.

#### **4.2.6 Level of customer satisfaction for serviceability**

Question 6th is about the serviceability & by observing the agreed answers were 70 customers out of 91 customers which is 77%. Totally negative answers were at the rate of 23%. Serviceability (functionality / gives high safety) is critical dimensions of quality (Garvin, 1983). Safety is one of most important factored on quality (Keller, 2001). The mean value verifies 2.01, which was "agreed" to this question and stranded deviation stands at a point of 0.74 which verify the relation if high. The customers have state positive answers under this question.

Question 13, results verify 94% of the customers were concerning on serviceability and out of them 76% of customers sown positive answers of the serviceability quality. And 24% was not. The mean value verifies 2.06, which was "agreed" to this question and stranded deviation stands at a point of 0.83 which verify the relation if high. The customers have state positive answers under this question.

The results showed there is no negative satisfaction of the product quality by analyzing serviceability factor.

#### **4.2.7 Level of customer satisfaction for conformance**

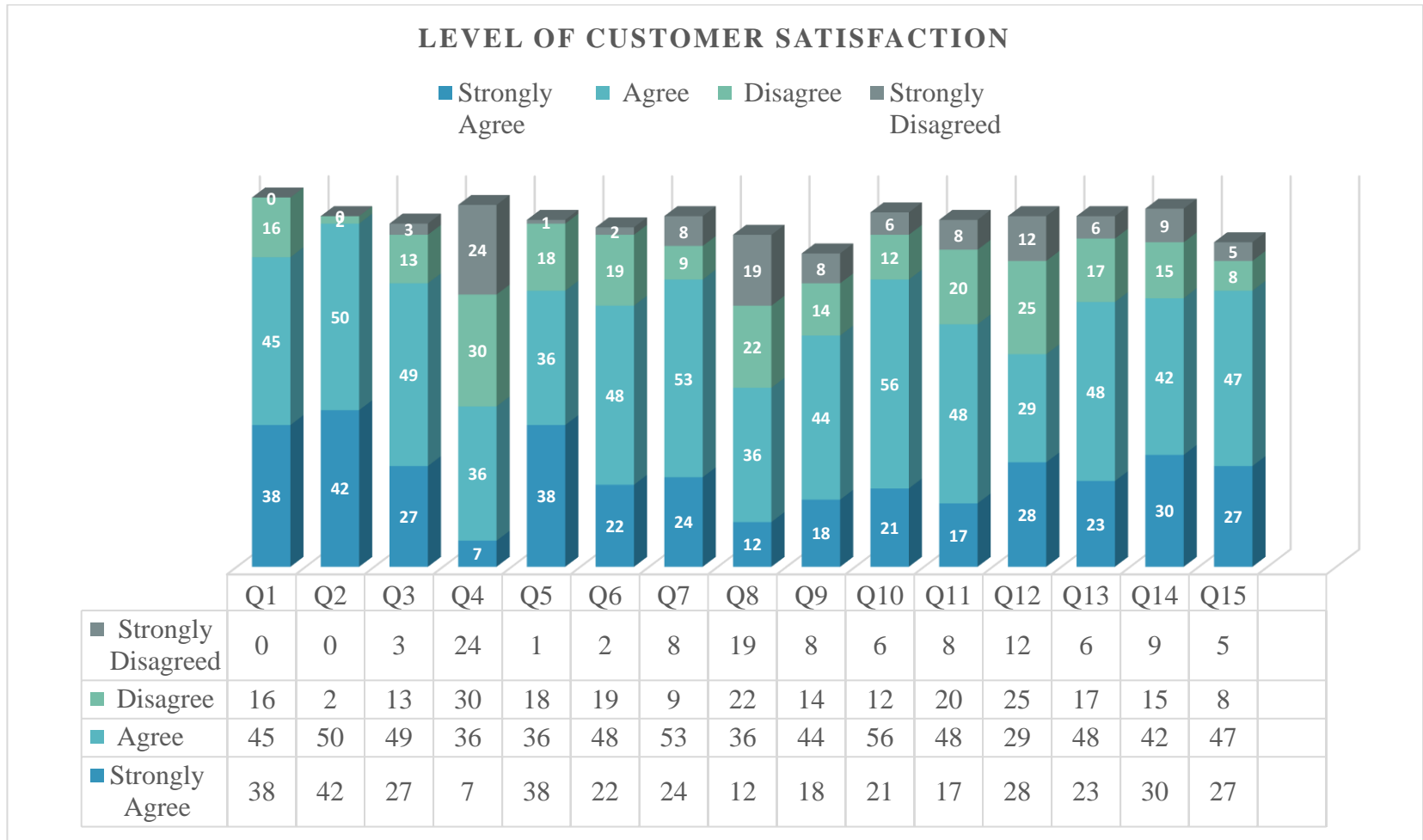
Question 10 & 11 base on safety and functionality of Casual wear garments offered by the retailer in Sri Lanka. Conformance count with focus accuracy measurements & Researcher had founded preserved quality levels was agreed as satisfied by many customers with a rating of 81% & 70%. But still there were 19% & 30% of customers who were not agreed to the questions in line. Results displays a mean value of above 2.03 for question 10 and for question 11 mean is 2.20 questions which was closer to agreed.

The results emphasized the customers of the casual wear sector is positively satisfied with the conformance dimension of product quality.

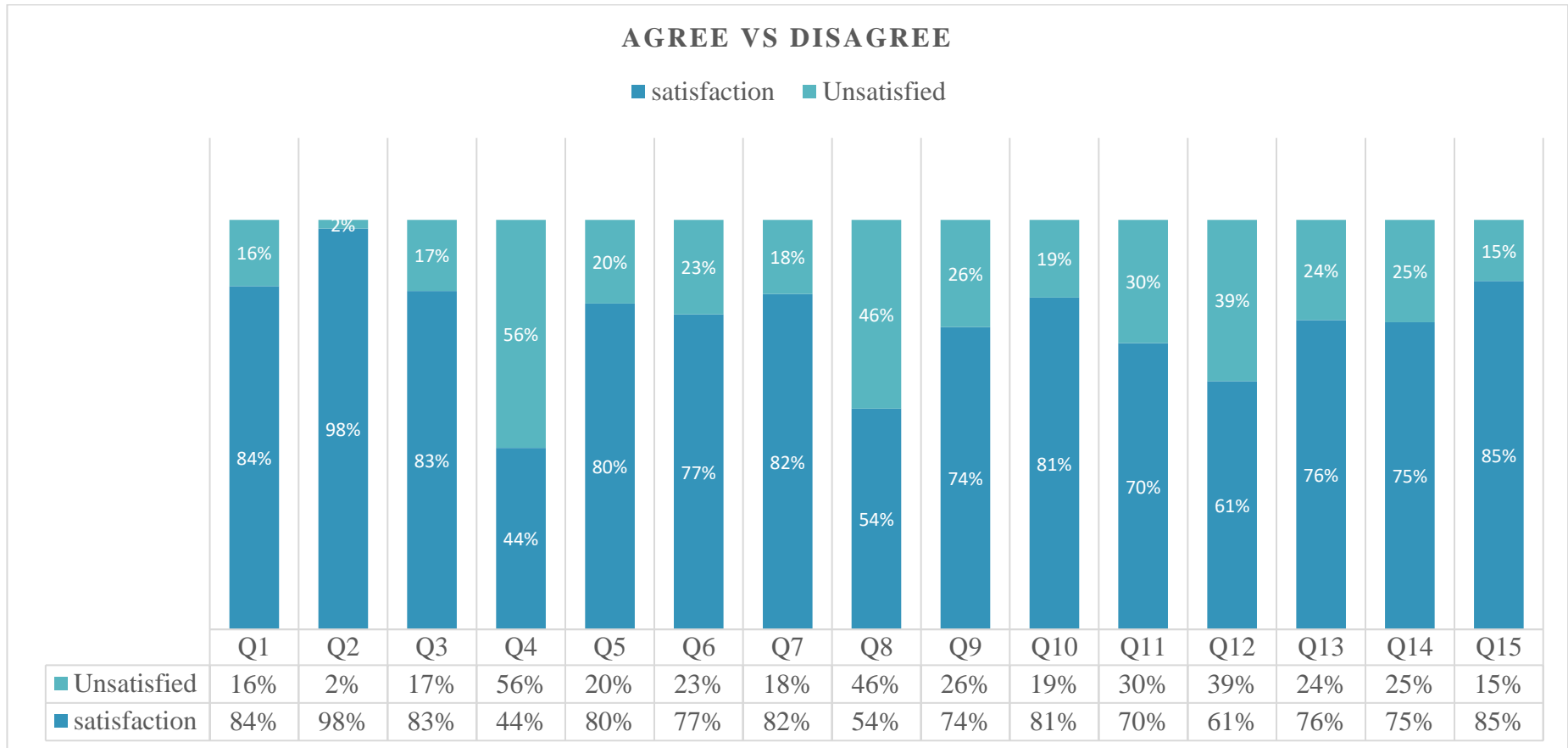
#### **4.2.8 Level of customer satisfaction for perceived quality**

Question 8th dimension of the quality- 5th was about the perceived quality. Researcher discussed only a few details about the perceived quality. This dimension is usually inferred by other seven dimensions of the quality. The answers show high strongly agreed time showed in question 5 (74) Totally positive answers were at the rate of 80% questions 5, as Literature highlight this result should be shown the customers satisfaction of proper packaging and labelling had positive effective on sales, (Dumasi, Dhurup & Mafini, 2014). Retailers today needs to understand and keep the levels if perceived quality up to an upgraded level as brand image was also depending on packaging and labeling, (Dapkevicius and Melnikas, 2009).

With analyzing questionnaire results, it presented the middle-income customers are satisfied with the offering delivered by casual wear retailer shops base on the Quality level they perceived.



**Figure 12 - Product quality satisfaction / agreed vs disagreed.**



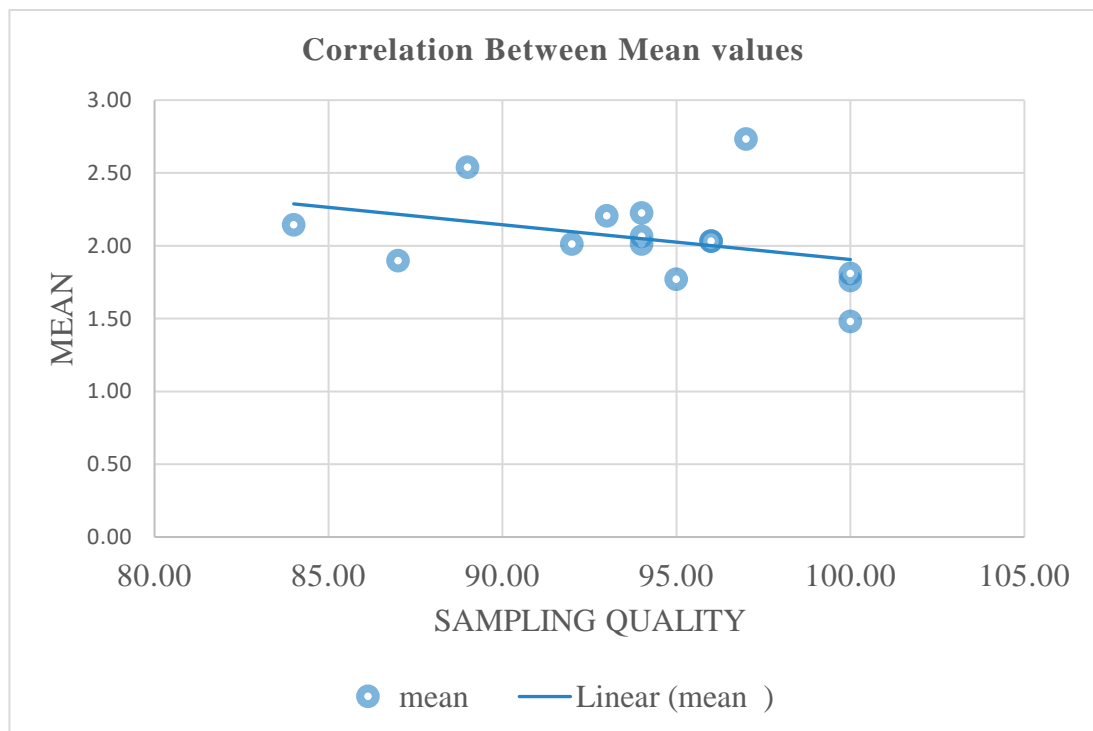
**Figure 13 - Product quality satisfaction / agreed vs disagreed levels (%).**

### 4.3 Summery to product quality satisfaction

Figure 12 describe the variation of the levels of Product quality satisfaction. The level of the satisfaction verifies less than 3 which is Disagree level. That was the level of Strongly Agree & Agree. Other than that, there were only two element which was above 2.5 rank for the question 4 (rank of 2.73) and 8th (rank of 2.54) which was verifying disagreed level. These questions were based on trendiness and yet the mean was less than the Disagree level of the Likert scale. That verifies the customer was satisfied base on the retailers offering on products quality. Figure 13 verifies the mean value variation of the data set and study realized only one was crossed the reasonable eye sight from the balance values. The Linear was running at the middle at a rate of 2, which indicate “satisfied”.

When considering the total mean value and the standard deviation of the products quality vs customer satisfaction, the lowest mean value was 1.48 and maximum was still 2.73. and the standard deviation lowest confidence level was 0.64 and maximum confidence level was 1.02.

The variance stands from lowest value of 0.41 and maximum 1.04. According to the survey results the average answering the questionnaire was at 94.07%. And The internal validity of this scale was again high, at  $\alpha = 0.84$  averaged, deviate from  $\alpha = 0.64$  to  $\alpha = 1.02$ .



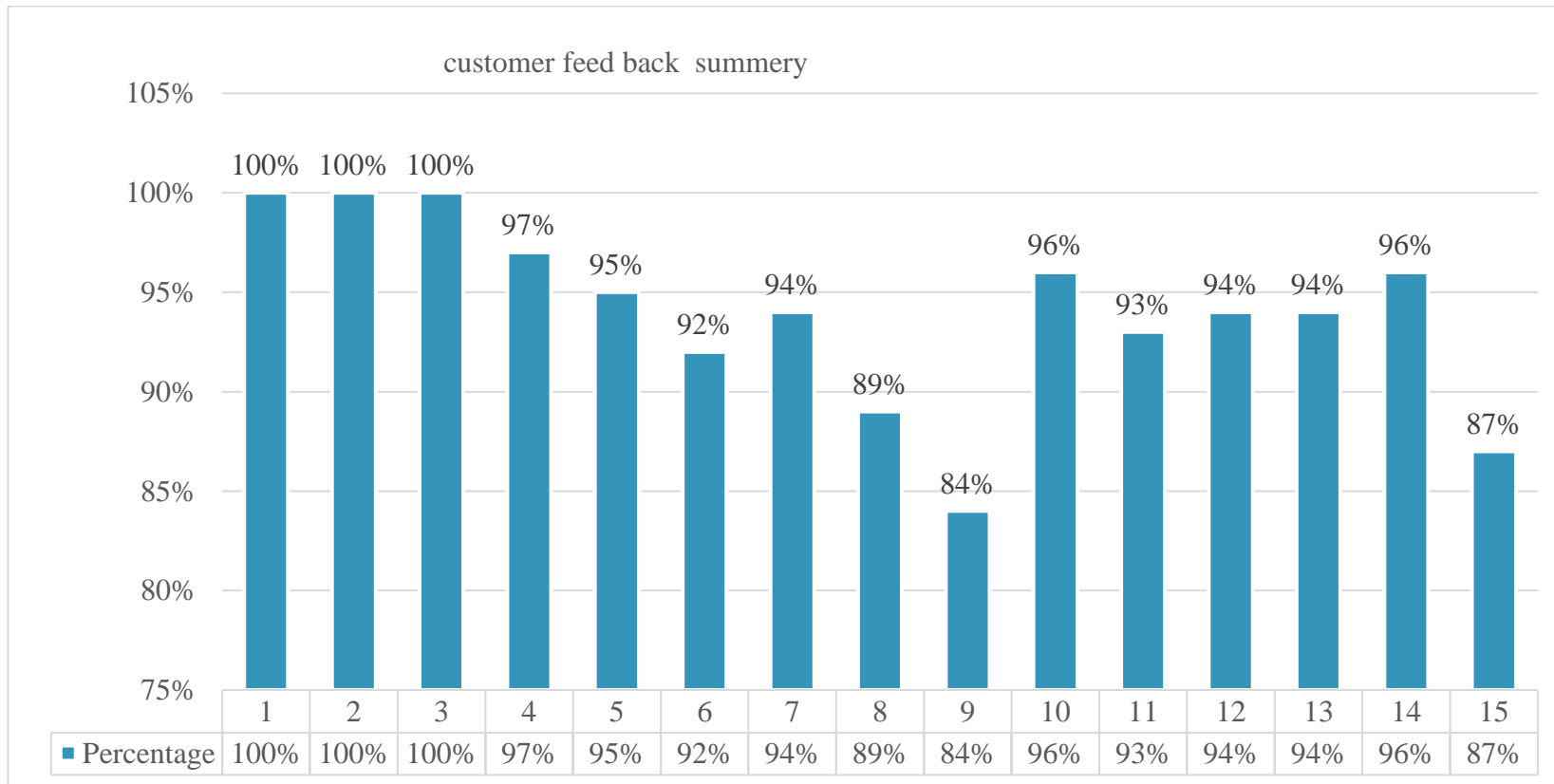
**Figure 14 - Correlation Between Mean values of the Product quality satisfaction.**



#### **4.4 Evaluation of customer feed back**

Research finding highlighted question 9 was ignored by majority. Only 86% was answered this question and this shows a customer awareness issue too. This question was mainly on the Features properties of the garment quality. There is a further study to be carried out to find out the reasons not to answer. Lower answer rate gives less weight to the research analysis but 86% is a reasonable value to count in.

The question 8 which is again based on Features - Satisfaction level for overall product quality level was not answer by secondly. Majority of customers 10% of them ignore this question. Further research would have recommended to find out if the customer is avower on the perceived quality or if the customer is fully unsatisfied.



**Figure 15 - Customers answer rate vs questions.**

With the answer rates most customers avoided answer question 08, 09 and 15<sup>th</sup>. All these questions re base on comfort, trendiness & base on aesthetics properties satisfaction.

Figure 13 was the Scatter chart which verify the relationship of the mean value series and the sampling quantity. Researcher has added the Linear bar as to have an easy understanding of the variance of the mean.

**Table 8 – Evaluating Product quality satisfaction.**

Question	not answered	answered	Total	percentage	standard deviation	variance	mean
Q1	0	100	100	100%	0.73	0.53	1.76
Q2	0	100	100	100%	0.64	0.41	1.48
Q3	0	100	100	100%	0.93	0.86	1.81
Q4	3	97	100	97%	0.92	0.84	2.73
Q5	5	95	100	95%	0.82	0.67	1.77
Q6	8	92	100	92%	0.74	0.54	2.01
Q7	6	94	100	94%	0.84	0.70	2.01

Q8	11	89	100	89%	0.98	0.96	2.54
Q9	16	84	100	84%	0.87	0.75	2.14
Q10	4	96	100	96%	0.78	0.61	2.03
Q11	7	93	100	93%	0.84	0.71	2.20
Q12	6	94	100	94%	1.02	1.04	2.22
Q13	6	94	100	94%	0.83	0.68	2.06
Q14	4	96	100	96%	0.92	0.85	2.03
Q15	13	87	100	87%	0.79	0.63	1.90

Table 8 was the summarized evaluated attendance sheets under topic - Product quality satisfaction. And the totals calculations of the percentage, sample standard deviation, variance, & Mean value for each question for clear reference.

**Table 9 – Evaluating mean and S. Deviation Product quality satisfaction.**

answers	Strongly Agree	Agree	Disagree	Strongly Disagreed	Total	Strongly Agree	Agree	Disagree	Strongly Disagreed	Satisfaction	Dissatisfaction
Q1	38	45	16	0	99	38%	45%	16%	0%	84%	16%
Q2	42	50	2	0	94	45%	53%	2%	0%	98%	2%
Q3	27	49	13	3	92	29%	53%	14%	3%	83%	17%
Q4	7	36	30	24	97	7%	37%	31%	25%	44%	56%
Q5	38	36	18	1	93	41%	39%	19%	1%	80%	20%
Q6	22	48	19	2	91	24%	53%	21%	2%	77%	23%
Q7	24	53	9	8	94	26%	56%	10%	9%	82%	18%
Q8	12	36	22	19	89	13%	40%	25%	21%	54%	46%
Q9	18	44	14	8	84	21%	52%	17%	10%	74%	26%
Q10	21	56	12	6	95	22%	59%	13%	6%	81%	19%
Q11	17	48	20	8	93	18%	52%	22%	9%	70%	30%

Q12	28	29	25	12	94	30%	31%	27%	13%	61%	39%
Q13	23	48	17	6	94	24%	51%	18%	6%	76%	24%
Q14	30	42	15	9	96	31%	44%	16%	9%	75%	25%
Q15	27	47	8	5	87	31%	54%	9%	6%	85%	15%

Table 9 summarized evaluated answer sheets under topic - Product quality satisfaction. And the totals calculations of the satisfaction levels a “Strongly Agree, Agree, Disagree, Strongly Disagreed” for each question.

Customers product quality has a higher tendency to experience positive Consumer satisfaction & base on this finding Customers were more satisfied with product quality with the products offered by the Sri Lanka casual were retailers.

#### 4.5 Mann-Whitney U Test data analyze

Researcher issuing Mann-Whitney U Test for the 2 group of customers to evaluate satisfaction and satisfaction. For the calculation it was used a software which was a web base software powered by tools including SPSS and Minitab, (Mann-Whitney U Test Calculator, 2018.) Mann-Whitney U Test for the satisfaction and satisfaction.

##### 4.5.1 Create Test data

To evaluate the satisfaction and dissatisfaction of the customers researcher used Mann-Whitney U Test. Different result for U depending on the statistics package of table 8 will be analyzed. The number of Z scores (i.e., the value of N) in sampling distribution was assumed as approximately normal to get the results. This means researcher used Z-ratio to calculate the value of p.

**Table 10 - Sampling distribution in the level of satisfaction**

Satisfied Group	Total answers	Strongly Agree For satisfaction	Agree For satisfaction
1	83	38	45
1	92	42	50
1	76	27	49
1	43	7	36
1	74	38	36
1	70	22	48
1	77	24	53
1	48	12	36

1	62	18	44
1	77	21	56
1	65	17	48
1	57	28	29
1	71	23	48
1	72	30	42
1	74	27	47
<b>Unsatisfied Group</b>	<b>Total answers</b>	<b>Strongly Disagreed For satisfaction</b>	<b>Disagree For satisfaction</b>
2	16	16	0
2	2	2	0
2	16	13	3
2	54	30	24
2	19	18	1
2	21	19	2
2	17	9	8
2	41	22	19
2	22	14	8
2	18	12	6
2	28	20	8
2	37	25	12
2	23	17	6
2	24	15	9
2	13	8	5



#### 4.5.2 Mathematical results evaluation

There were taken using the calculator software program (Mann-Whitney U Test Calculator, 2018). Two-tailed hypothesis were used in 95% (0.05) of Significance Level to get the answers. The value of U is 2. Which means the satisfied customers were selected.

**Table 11 - Generated values (N) and ranks**

Satisfied Group	Unsatisfied Group	S1 Values	S1 Ranks	S2 Values	S2 Ranks
83	16	43	15	2	1
92	2	48	16	13	2
76	16	57	18	16	3.5
43	54	62	19	16	3.5
74	19	65	20	17	5
70	21	70	21	18	6
77	17	71	22	19	7
48	41	72	23	21	8
62	22	74	24.5	22	9
77	18	74	24.5	23	10
65	28	76	26	24	11
57	37	77	27.5	28	12
71	23	77	27.5	37	13
72	24	83	29	41	14
74	13	92	30	54	17

**Table 12 - Results evaluation and U value structuring**

<b>Sample 1</b>	<b>Sample 2</b>	<b>Sample 1 &amp; 2 Combined</b>
Sum of ranks: 343	Sum of ranks: 122	Sum of ranks: 465
Mean of ranks: 22.87	Mean of ranks: 8.13	Mean of ranks: 15.5
Expected sum of ranks: 232.5	Expected sum of ranks: 232.5	Standard Deviation: 24.1091
Expected mean of ranks: 15.5	Expected mean of ranks: 15.5	
U-value: 2	U-value: 223	
Expected U-value: 112.5	Expected U-value: 112.5	
U-value: 2		
Expected U-value: 112.5		

Result 1 - U-value = The U-value is 2. The critical value of U at  $p < .05$  is 64. Therefore, the result is significant at  $p < .05$ .

Result 2 - Z-ratio = The Z-Score is 4.56259. The p-value is  $< .00001$ . The result is significant at  $p < .05$ .

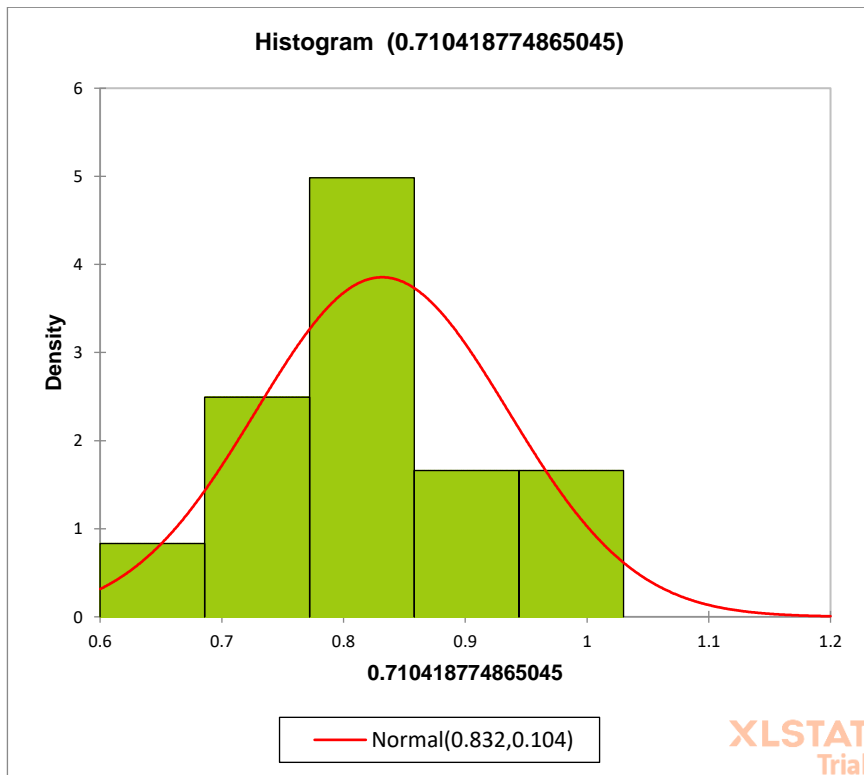
#### **4.6 Summary statistics: using parametric tests**

The results showed as maximum value of 1.026 and minimum value of 0.635. Histogram had one peaks in the histogram and balance had them all located within the range of the normal distribution. There were no gaps or extreme values. When data were skewed, the majority of the data had located on one side of the histogram. The data in the following graph were right-skewed. Most of the sample values were clustered on the right side of the histogram.

With Evaluate how closely the heights of the bars follow the shape of the line, with this the study confirmed the sample was good fit to the theoretical distribution.

**Table 12A - Data table to calculations**

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Standard deviation
<b>0.710418774865045</b>	14	0	14	0.635	1.026	0.832	0.104



**Figure 16 - Histogram diagram**

#### 4.6.1 Descriptive statistics for the intervals

**Table 12B - calculated data of parametric tests**

Lower bound	Upper bound	Frequency	Relative frequency	Density (Data)	Density (Distribution)
0.6	0.686	1	0.071	0.831	0.067
0.686	0.772	3	0.214	2.492	0.202
0.772	0.858	6	0.429	4.983	0.318
0.858	0.944	2	0.143	1.661	0.261
0.944	1.03	2	0.143	1.661	0.111

## **CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Conclusions**

With analysis of all 15 questions, it presented the middle-income customers are satisfied with Performance, Features, Reliability, Conformance, Aesthetics, Durability, Serviceability & Perceived quality, based on products offering delivered by casual wear retailer shops.

Its presented selected sample of customers are negatively satisfied with Aesthetics, Features, & Durability factors based on products offering delivered by casual wear retailer shops. The results showed that middle income consumers of apparel products, expect the product quality dimensions to have in an appropriate level. This research was an instrument developed, to provide an insight, to which appeal retailers can directly understand, the levels of full-filled expectations of their clientele, with the offering they provided, based on apparel product quality.

Research finds 8<sup>th</sup> of key dimension from the literature and the dimensions are Aesthetics, Features, & Durability, Performance, Features, Reliability, Conformance, Aesthetics, Durability, Serviceability & Perceived quality.

The Age group and the population was clearly capture in the sampling. Sample had customer income levels which is not match to the population and those results are removed at the time of analyzing. Middle income group was highlighted and the Shops which cater to the middle-income group (Appendix 4) was nominated. The customers identified as non-regular customers are also removed to secure the results are from the correct population.

Research analysis the level of customer satisfaction towards product quality offered by Sri Lankan apparel retailers and highlighted customers are satisfied with Performance, Features, Reliability, Conformance, Aesthetics, Durability, Serviceability & Perceived quality. But they are negatively satisfied with Aesthetics, Features, & Durability.

## 5.2 Recommendations

The major insights gained through questionnaire has suggested retailers needs to pay attention on where customers satisfaction been throwing down. The success of the apparel retailing market will depend as much on effective customer satisfaction as on analysis of research. After reviewing customer questionnaire processes, the following conclusions were reached in this study, which aimed to determine effective customer satisfaction. These recommendations were based on the study findings and aim at establishing product quality which will eventually lead to customer satisfaction.

### 1. Introducing a new product line with improving Aesthetics characteristics.

It was believed that it would be beneficial for both retailers and consumer satisfaction if these businesses that manufacture clothing and that necessarily have to adapt to today's competitive climate and continually produce new products were to carry out research aimed at their own consumer masses when creating new products taking these kinds of studies into account. Research noticed 56% of the population has not observed products with washing treatments like coloring and dying which used to make different looks and designs like buckets dyes, Tie-Dyes using different options, Wax Batik Techniques, Water-color Techniques.

### 2. Highlighting the values addition applied to increase the quality for Aesthetics.

Researcher suggest adding a “Non-treat fabric panel “as a tag to the main shell of garment. So that customer knew how was the greige fabric looks like and what sort of treatments has been done to get him/ her the final garment. This application to be applied for the garments finished with the techniques of buckets dyes, Tie-Dyes using different options, Wax Batik Techniques, Water-color Techniques.

### 3. Quality assurances for Fit measurements

Customers highlighted negative results of meeting “well-fitting” of the appeal predicts. Retailers needs to action soon at this point to reduce the products returns and sales drop. Its recommended quality assurances teams check measurements two times before send them to the retailer shops.

### 4. Re calculate the cost / profit mark up and sales.

Researcher notice a Reasonable Pricing was one area where customers highlighted the negative satisfaction. High price not always maximize the profit. It is giving a chance to the competitor to win your customers. Thus, the pricing strategy to be re validate

and action cost reduction options where can applied. Reasonable price acquires more customers and make them satisfied.

#### 5. Re validate the care instruction

Study highlight negative responds on care labels verification and washing durability. Customers are not believed in the wash care labels and they don't recommend the wash durability of the products offered by the retailers. Its recommended to re work on the care instructions and recommend getting contribution of a garment technician at the time of care labels defined. A suitable garment care indeed quality for a retailer who is trustworthy.

### **5.3 Limitations of methodology**

The research was limited to the women's casual-wear retailers in selected shops and not all retailer's shops in entire country, due to lack of time and resources.

The questionnaire data collection was distributed to team of women's who were found randomly and only those who willing to pen down the details

The sample population were the data collection will be used to evaluate the retailers offering towards the satisfaction. Hence the "likeness to the retailer" may be a point to scour more marks in satisfaction and not only the products offered.

This study focused only on product quality to evaluate the satisfaction and quality was based on eight of selected indications. There were other factors which may has influenced the customers satisfaction levels.

Study had estimated the middle-income customers purchase products from the retailer shops which were catering the middle-income women. But there can be other parameters which was locating the middle-income customers to a lower level shops or shops which have the target riche customers.

### **5.4 Scope for further research**

Despite attempts to confirm that the findings of this research were both trustworthy and effective, several limitations lie. Originally this survey had a very less number of respondents. The view of 143 respondents cannot replicate the responds of the entire Casual wear retailing shops. And researcher has taken customers of only shops, which did not reflect the total shops available in the country.

Research has described the findings using MS Excel sheets and a further investigation can be done using more mathematics. Researcher has given non-exclusive right to reproduce, distribute or to use this content in whole or part in future works to have any further research.

Further as mention in introduction to study, researcher unable to find a collective source of research or a survey which displays the market size of apparel and clothing retailing. Most of them search for exports markets when it comes to apparel survey and in the markets, there were much to investigate in Sri Lanka market of manufacturing and retailing other than exports market as a Further study.



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