GLOBAL ACADEMIC RESEARCH INSTITUTE

COLOMBO, SRI LANKA



GARI International Journal of Multidisciplinary Research

ISSN 2659-2193

Volume: 03 | Issue: 02

On 30th June 2017

http://www.research.lk

Author: Anuththara Gangoda, Niromi Seram

Department of Textile & Clothing Technology, University of Moratuwa, Sri Lanka

GARI Publisher | Apparel | Volume: 03 | Issue: 02

Article ID: IN/GARI/02ICATFD/2017/154 | Pages: 01-12 (12)

ISSN 2659-2193 | Edit: GARI Editorial Team

Received: 24.03.2017 | Publish: 30.06.2017



VALUE ADDED 'EDGE FINISHING TECHNIQUES': A STUDY OF THE SRI LANKAN MARKET

¹ Anuththara Gangoda, ² Niromi Seram

^{1,2} Department of Textile & Clothing Technology, University of Moratuwa, Sri Lanka ¹anugangoda@gmail.com, ²anugangoda@gmail.com

ABSTRACT

The objectives of this study are twofold. The first objective of the study was to compare the globally available techniques for edge finishing of apparels with the edge finishing techniques available in the Sri Lankan market. This operation is usually performed in order to add value to apparels intended for the premium market. The supplementary objective was to identify the factors that determine the quality of edge finishing in the Sri Lankan context. Careful observation was made of photos of edge finishes taken in the USA & UK representing the global premium level brands. The edge finishing of apparels at premium level fashion stores in Sri Lanka was also scrutinized carefully in order to accomplish the first objective of the study. A series of interviews with Sri Lankan apparel designers provided the data for the second objective of the study. Data were systematically evaluated using statistical and logical (thematic analysis) techniques. It became apparent that only the "serged seam" technique was popular in Sri Lanka by far since it was easy to perform with a simple machine attachment. Even other edge seams which could have been used in garments without much additional cost being incurred have not been used in the Sri Lankan premium quality apparel market. It was also concluded that the attitude of Sri Lankan designers in the matter of edge finishing of the garments reflected apathy and a lack of awareness. Low purchasing power of Sri Lankan customers, lack of industrial technology, lack of skilled labour and poor knowledge were among the factors that limited the exploration and adoption of value added edge finishing techniques for apparels in the Sri Lankan market. This study will be of significance to the designers and technologists in Sri Lanka as it will help them to gain an understanding of not only the globally available edge finishing techniques but also of the importance of keeping pace with modern edge finishing technology to provide good quality garments to the Sri Lankan consumers. Key words-edge finishing, value added edge finishing, apparels, Sri Lankan market.Abbreviations: SL- Sri Lanka, UK - United Kingdom, USA- United State of America



Introduction

The fashion industry brings many benefits to the lives of millions of people across the globe. Fashion goes far beyond simple clothing and is used to enhance a person's appearance, personality, status, and create in him/her, a sense of wellbeing. The design of fashionable garments calls for creativity on the part of the designer and the evolution of fashion and fashion techniques can provide benefits to the producer and the consumer and indeed everyone in the supply and distribution chain. In this context garment edge finishing and processing has emerged as one of the important production routes towards meeting the quick changing demands of the fashion market(Heaton & Baker, 2014;Malik &Parmar.2014).

"Finishing of garments is carried out to increase the attractiveness and/or serviceability of the garment. Different edge finishing treatments are available to get various effects, which add value to the garment" (Malik &Parmar, 2014).

A range of innovative edge finishes are being developed along with suitable machinery to put them on apparel; these literally provide an edge to those in the fashion sector who use them over those who don't, and in numerous applications too. As the name suggests, 'value added edge finishing' enhances the value of the garments of any brand by using advanced technology with creative design solutions to finish the edges of garments (Heaton & Baker, 2014; Johnson, 2013; Malik &Parmar, 2014).

Edge finishes/ seam types

There are some standard seam techniques that technologists normally use to get garments constructed neatly. They do this by concentrating on perfecting seam allowances, matching cut pieces end to end, lining up seams, and measuring hems exactly (Johnson, 2013).

Seam finishes may also be referred to as "edge" finishes, as they are often used in locations other than seam allowances. These locations include hem edges and facing. The method of construction is always the same, and the goal is to prevent a raw edge from unraveling (woven fabric) or curling (knit fabric) (Heaton & Baker, 2014).

1.2 Edge finishing techniques used in the Sri Lankan market

Gone are the days of traditional and conventional fashion in Sri Lanka, which is now being greatly influenced by Western forces. But the rate of induction and adoption of technology and improvement in quality of garment finishes along with the rate of the fashion adoption is relatively low. This is particularly true when the premium fashion market of Sri Lanka is considered. A large number of high end clothing brands are emerging in Sri Lanka, but still their popularity and the general public's awareness of them is very low. Since it is the premium fashion market that makes a major contribution to a fashionable Sri Lanka, improvement in the finishing technology of garments in the premium fashion market will boost the quality of consumers' lifestyle at large.

1.3 Objectives of the study

Thus, the objectives of this study were twofold. First objective of the study was to compare the globally available techniques of edge finishing for adding value to apparels in the premium market with the edge finishing techniques available in the Sri Lankan market. The supplementary objective was to identify the factors that have led to the below par quality of edge finishing in the Sri Lankan context.

Table 1- Commonly used edge finishing seam types (Anne, 2013; Bryant, 2016; Germaine, 2014; Heaton &Baker, 2014; Johnson, 2013; Nordstrom, 2013)



Seam type	Placement	Applicable fabrics	Special comments
French seam	Tucked seam inside of the garment	Lightweight woven, sheer or other delicate fabrics	Strong and durable
Mock French seam	Used in curves inside of the garment for fine garment sewing	Lightweight woven or other delicate fabrics	Bit harder than the normal French seam
Hairline seam	Specially good for collars and enclosed areas	Used on woven lightweight fabrics	Ultra-thin version of French seam
Flat felt seam	Straight edges inside of the garment. Sometimes on outside as a decorative value addition	For any fabric that is raveled and difficult to control	Mainly used for woven fabrics
Welt seam	Placed on items that will be lined or will not have exposed seams or edges	Can be used for fabrics that don't unravel	Referred to as mock flat felt seam
Hong Kong Seam		Light weight closely woven fabrics	Adds a measure of luxury to garments
Corded or piped seam	Can be used in collars, cuffs, pockets or anywhere else a decorative accent to a seam line is needed	Not suitable for light weight sheer fabrics	Used as a decorative value addition to the garment
Lapped seam	When a seam is difficult or impossible to stitch or when joining interfacing pieces to eliminate bulk	For non-woven fabrics such as suede or felt	Referred to as 'tucked' or 'decorative lapped' seam
Serged seam	Inside seam of the garment where the stretch is important	3 thread serged seam is used for knit fabrics and 4 thread serged seam is used for woven and some knit fabrics	Needs an overlock machine

RESEARCH DESIGN

In this particular study, the brands that hovered at the upper end of the mass market and those positioned between the high-end fashion markets and cheaper discount fashion markets (Hameide, 2011) were considered as the premium fashion market brands.

The primary approach to the research was designed to achieve the above mentioned objectives.

2.1 Objective 1 - To compare the currently available edge finishing techniques in Sri Lanka and in the global premium fashion markets.



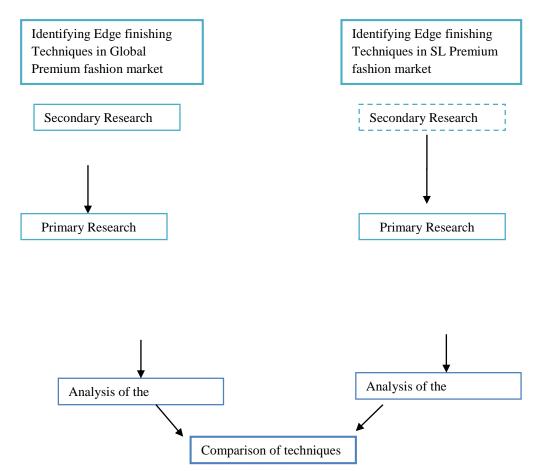


Fig 1- Research process to achieve Objective 1

2.2 Objective 2 - To identify the factors that have led to the prevailing quality of edge finishing in the local apparel sector

Data was collected by means of semi-structured interviews and the interview guideline design was based on set themes.

Complete details of available technology and other factors that affect the quality of edges in the Sri Lankan market were gathered through semi-structured interviews with the designers of premium fashion brands in Sri Lanka

Awareness of and concern about the factors that can affect quality and competitiveness in the market were discussed with Sri Lankan designers involved in edge finishing operations

The interviews were transcribed and the data were analyzed manually using mainly logical (thematic analysis) techniques

LIMITATIONS OF THE RESEARCH DESIGN

It was noticed that not only a very limited number of premium fashion stores were available for the study but



also very few designers were actively engaged in the premium fashion brands.

The research had to be limited to the UK and USA to represent the global premium fashion brands.

DATA ANALYSIS AND DISCUSSION

The data collected through market research and interviews were systematically analyzed using statistical and logical (thematic analysis) techniques to pursue the above mentioned objectives.

3.1 Data analysis of the observation study

For the observation study, the edge finishing techniques reflecting the state of the art were used as the guideline.

3.1.1 Global Premium level market

One important point to which attention must be drawn before the market analysis is that there is a wide gap existing between the Sri Lankan premium level market and the global premium level market. It is that the global premium level market seems to be more organized and much more refined in quality and in the pricing strategy than the Sri Lankan premium level market, which is of a more variable nature quality-wise as discussed later in this section.

To explore the edge finishing techniques available in the global premium level market, photographs were taken at premium level stores to observe the types of innovative edge finishes being used there. It was observed that serged seam and welt seam were the most common types of edge finishes that were available in the global market. The reason for this was probably that they are the types of seams that could be mass produced easily since the machine technology was readily available and the sewing was easier unlike the other seam types that needed more skilled labour, more time and costlier machinery.

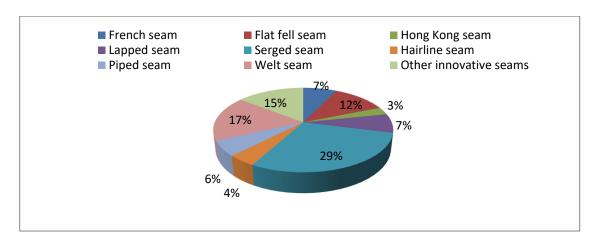


Fig.2. Edge finishing seam types in the global market

Besides these two seam types, other seam types were also available at considerably higher rates. A notable feature is that the global premium market periodically introduces new seam types which saturate 15% of the market.

3.1.2. SL Premium level Market



The Sri Lankan premium level market had a more diffused character, and the market search had to be diversified to encompass all the strata of the SL premium level market. After conducting some research in the premium level stores in SL, the following edge finishing seam types were statistically noted down.

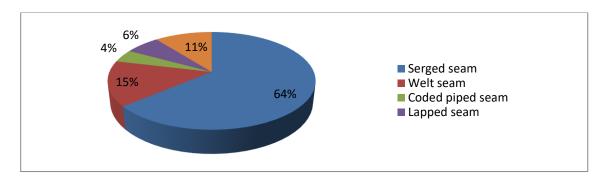


Fig.3. Edge finishing seam types in use in SL market

It was observed that the most common type of seam in the SL market is the serged seam, as is the case in the global market. But its occurrence was much more common and far higher than what it was in the global premium level market. At the same time, a wide range of seam types could not be seen here and only a few innovative seam types were present.

3.2. Interview data analysis

3.2.1. Brand analogy

The interviews that were carried out with eight designers presented rather divergent ideas regarding the entire question of value added edge finishing. The basic details gathered from the designers who were interviewed Table 2- Sri Lankan premium fashion brands

regarding their premium level fashion brands are as follows.

According to the brand analysis of the premium level market of SL, it was evident that the pricing strategies of the different brands varied considerably and the reason the designers proffered for this was that their product lines were different and had to target a broad range of customers. It was observed that the quality and the value added edge finishing techniques that these brands used did not vary to any marked extent, but were quite similar.

Brand	Customer category	Clothing category	Price range
A	Girls and women (age between 13-45)	Women's casual, resort and evening wear	Rs 3000-20000



	Men	M	D - 2000 15000
D	(20-40 years of age)	Men's casual, resort and evening wear	Rs 3000-15000
В	Corporate Men (25-50 years of age)	Corporate men's wear	Rs 1500 and above
	(23-30 years of age)	Corporate men's wear	Ks 1500 and above
С	Women	Women's wear	Rs 500-1500
	(25-35 age)		
	Men	Men's wear	Rs 1000-3000
	(25-35)		
D	Women	Women's evening, resort and bridal wear	Rs 3000-60000
	(20-40 years)		
	Men	Men's evening and resort wear	Rs 3000-10000
	(30-45 years)		
Е	Girls and women	Female swim wear	Rs 1000-4000
	(15-30 years)		
F	Women	Women's casual wear	Rs 2000-5000
	(20-30 years)	(multifunctional)	
G	Women, men and		
	teenagers	Unisex clothing	Rs 1500-4000
	(15-35 of age)		
Н	Children	Children's wear	Rs 500-2500
	(4-12 years)		

3.2.2. Interest taken by SL designers on edge finishing techniques

The designers who pay attention to the edge finishing of the garments when designing and developing the product were as follows.

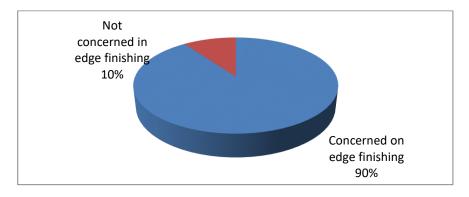


Fig 4.Interest of SL designers on edge finishing techniques



The designers who were concerned about the edge finishing when designing and developing the garment provided the following reasons for their interest in this particular topic.

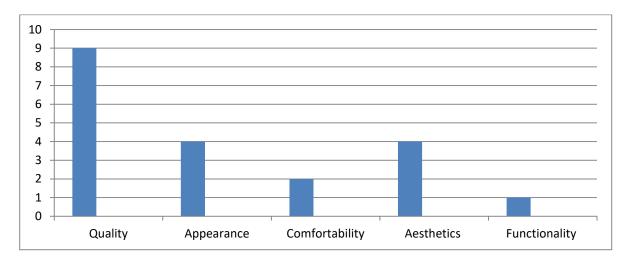


Fig. 5. Reasons for insisting on proper edge finishing of garments

Almost all the designers declared that quality was the major reason for them to be interested in including value added edge finishing for their designs. Although some people may think it is the appearance that gives value to the garment, this is not always the case. As stated by the designer of brand B, edge finishing not only adds value but it also defines the whole image of the garment.

The argument that the designers should not be overly concerned about the edge finishing also came up during the interview. It was that value addition is not necessarily achieved through edge finishing alone and it depended more on the artistry and the identity of the designer. Some designers said that high quality could be achieved by other value addition measures as well and therefore paying attention to edge finishing only diverted the designer from exploring other ideas.

The percentages of designers who follow international trends and reports on edge finishing and of those who do not are given in Fig. 6.

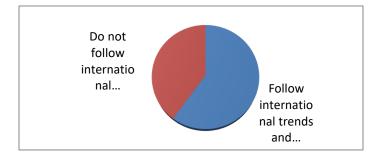


Fig.6.Designers who follow international edge finishing trends and innovations

Although most of the designers said that they were concerned about edge finishing, it seemed that only about 60% of them were sufficiently interested in following up on the international trends while the rest were not so concerned about this issue.

All of the designers said that the finishing of the garment is as important as the design of the garment, and that it is the responsibility of the designers to provide quality along with aesthetic appeal to the consumers to justify the price that they pay.



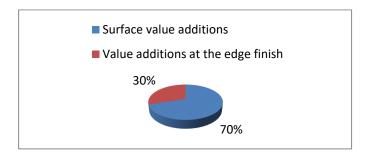


Fig.7.Areas requiring critical attention when designing

It was the considered opinion of most designers that for the Sri Lankan market giving emphasis to edge finishing techniques as a value addition measure was not as important as making value additions to the surface. SL customers were more concerned about the appearance and finish of the surface and therefore value addition should be aimed at this area. They were not so particular about the quality that could be offered through classy edge finishing. It was the designers' view that the Sri Lankan consumers' mindset was still not open enough to embrace the concept of structural quality, as they were only concerned about the surface appearance.

The factors that are considered by designers when choosing an edge finishing technique for garments are given different weightings as shown in Fig. 8.

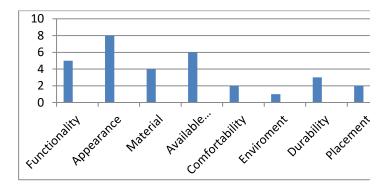


Fig.8.Factors taken into consideration when designing edge finishing

It becomes apparent that the appearance, availability of technology and functionality are the factors that designers are most concerned with when selecting the edge finishing for a garment.

3.2.3. Comparison and limitations in SL market for proper edge finishing

All designers admitted that the edge finishing value additions practiced in Sri Lanka are not by any means up to international standards. Numerous opinions were voiced by them and the major reason they all cited was that Quality was of only minor importance to the majority of Sri Lankan population, and what they were mainly interested in was the appearance and the beauty of the garment. As a result, SL designers do not feel motivated to design for the overall quality of the product.

They also observed that the fashion clothing business had become a popular trade only in the last few decades, and that now as the purchasing power of people was increasing, the customers were getting exposed to the products of the international market. Therefore, in future, the quality of edge finishing will become an important issue when people go shopping for clothing items.

Conversely, in the case of international customers, quality is the major factor that they consider when purchasing goods. According to one of the designers, once the customers acquire a taste for quality, which can be quite addictive, Sri Lankan customers will hopefully lead the way there.

Following the discussions and interviews with designers, the major limitations and barriers, and the lack of interest that stood in the way of value added edge finishing in the Sri Lankan market became quite apparent. These are explained below in order, with the most daunting barrier listed at the top.



Cost effectiveness- Designing and developing new, innovative value added edge finishes could prove to be a costly exercise. But Sri Lankan customers may not have sufficient purchasing power for the designers to take this risk and explore the niche market.

Technology- Lack of industrial facilities and machinery to implement the desirable value addition at the edges.

Knowledge- SL designers do not possess the knowhow on new trends and innovations in the world market in a specialized area such as edge finishing.

Skilled Labour- Even though designers can come up with new, innovative edge finishes, sometimes there may be a lack of technical staff with enough expertise to develop and turn them out in quantity.

Raw materials- Sri Lankan designers are really behind the international brands in the matter of integrating novel raw materials and fabrics into their designs.

CONCLUSION

The study revealed that the exploitation of value added edge finishing techniques in SL was very low unlike in the global market, which had a variety of diverse edge finishing techniques that are used regularly in its premium products. In Sri Lanka's premium level market, the most commonly used edge finishing technique is "Serged seam," which is the easiest and the cheapest technique for finishing a seam using standard machine technology. This reveals that SL designers are not much concerned about exploring different edge finishing techniques even though there are strong arguments in favor of using them in various apparel products. For example, the "French seam," "Hong Kong seam" and "Flat felt seam" are completely nonexistent in the SL premium level market. As these edge finishing seam types need more expensive machinery, longer production time and skilled labour, the garment producers might have been discouraged from using them in their designs.

Although SL designers have claimed that they are interested in the value addition potential of edge finishing garments, in practice they have only been paying lip service to this idea, as is evident from the market research findings. This fact is proved through their lack of interest in following up on international trends and innovations. It is strongly recommended that vigorous follow up action should be taken on implementing edge finishing solutions by the designers to provide customers with better products. Even though the designers declared that they were using edge finishing for enhancing the quality of garments, they also confessed that they were mostly concerned about the appearance rather than the quality when designing for SL customers as the latter were more focused on appearance than quality. This may be the main reason why edge finishing techniques were not seriously explored by Sri Lankan designers.

As it was said that the purchasing power of SL customers was low, it was assumed that the time and money invested in exploring more edge finishing designs would not be justified. However, it was learnt by referring to the literature that some edge finishing techniques do not really cost all that much and are also fairly easy to produce. It is recommended that Sri Lankan premium garment producers look closely at these "Seam finishes" with an open mind and positive outlook as these possibilities can add more value to the garment through superior edge finishing.

It is suggested that the other value addition methods like embellishments be reduced to save on costs, and those savings utilized to give more value at the edges. That is, instead of focusing on surface value additions like embroidery, screen printing and other embellishments give SL customers the taste of deep down quality. Although the SL customers are not much accustomed to true quality, it is the designer's responsibility to lead the consumers towards international quality standards by providing them exposure to more suitable and updated products in line with global trends. Therefore, they



should make the best use of the available technology by giving consumers the maximum feel of quality by introducing modern and affordable edge finishing techniques.

REFERENCES

- Anne, W. (2013), "On bound buttonholes and Hong Kong finish", available at https://avintagebelle.wordpress.com/2013/11/14/on-bound-buttonholes-hong-kong-finish/.html
- Barter, S. (2012), Tailoring Technology to the urban cyclist, Masters Theses, Auckland University of Technology
- Bryant, Austin. (2016), "Know your terminology: Over lock stitch Vs. Flat-felled Seam", available at http://www.heddels.com/2014/04/know-terminology-overlock-stitch-vs-flat-felled-seam/.html
- Eckerson, N. S.(2012), Creating original garments using Couture sewing methods, Masters Theses, Western Michigan University
- Germaine, T. (2014 a), "How to overcast", available at http://whafi.com/sewing-techniques/how-toovercast.html
- Germaine. T.(2014b), "How to sew a lapped seam", available at http://whafi.com/sewing-techniques/how-to-sew-a-lapped-seam.html
- Hameide, K.(2011), Fashion Branding unraveled, Fairchild books, New York
- Heaton, L. and Baker. M.M. (2014), "Seams and Seam finishes", working paper, University of Kentucky, Lexington, KY
- Heischberg, M. (2010), "Hairline seam", available at http://www.sempstress.org/skill/hairline-seam/.html

- Jana, P.(2011) "Assembling technologies for functional garments: An Overview", Indian Journal of Fibre and Textile Research, Vol. 36
- Johnson, Liz, (2013a), "Machine sewn seam finishes- Mock French seam and French Wrapped Seam- Part 3 and 4", available at http://www.sew4home.com/tips-resources/sewing-tips-tricks/machine-sewn-seam-finishes-mock-french-seam-french-wrapped-seam.html
- Johnson, Liz. (2013b), "Machine sewn seam finishes –Most popular- Part 1 of 4", available at http://www.sew4home.com/tips-resources/sewing-tips-tricks/machine-sewn-seam-finishes-most-popular-part-1-4.html
- Lee, L. (2016)," Seam finishes for silks", available at http://www.threadsmagazine.com/ item/3702/seam-finishes-for-silks/page/all.html
- Malik, T and Parmar. S. (2014), "Special finishes to a garment- An overview", working paper, Institute of Technology and Science, Baroli.
- Maris. S. (2010), "Tutorial: 10 ways to finish your seams", available at http://www.sewmaris.com/tutorials/tutorial-10-ways-to-finish-your-seams.html
- Santos, H. D. (1994), A guide to modern tailoring concepts:

 A practical outline to some new ideas and techniques, Masters Theses, University of Johannesburg
- Vijayalakshmi, D. and Ramachandran, T. (2012) "Isolated application of multifunctional finishes on denim garments". Daffodil International University Journal of Science & Technology. Vol. 7, Issue 1



 $02^{\rm nd}$ International Conference on Apparel Textiles and Fashion Design