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# A Study On Acceptance Of Khadi Fabric In Lingerie

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### Abstract

Khadi is the most versatile fabric, eco- friendly and sustainable fabric. It has the unique property of keeping the wearer warm and cool according to the environment. The unique woven technique of khadi allows the passage of air through fabric easily that's why it is a wonderful fabric for summer season It is a light weight, airy and skin friendly fabric and available in variety of colours. In summer season, this fabric is incredibly comfortable due to its airing quality; it can easily absorb wetness and keeps the wearer cool and dry. Khadi cotton is available in variety of prints as well as in solid colours. The various types of outfits made from khadi silk are salwar kameez, jackets, Sarees etc. Over the past few years, Khadi has suddenly transformed it's positioning and branding. Many renowned designers start experimenting with this fabric and change its utility from boring fabric to a chic fabric. Now, Khadi has gained over the globe appreciation as it is constructed by hand, which make it long lasting, organic and unique. Some internationally fame fashion designers started to appraise khadi to design contemporary work wear also for the bridal wear to make sure that Khadi always remained in vogue.

Key words:- Khadi, Lingerie, Acceptability, Marketability

### Advantages and Disadvantages of khadi Fabric in Lingerie

As khadi is a sustainable and eco- friendly fabric. It can meet all the requirement of modern era. Some of the basic advantages of khadi fabric in lingerie are discussed below:

#### Advantages of Khadi fabric

- Khadi is a self-textured fabric.
- Khadi has the unique property of keeping the wearer warm and cool according to the environment.
- Good absorbency and friendly to skin.
- Khadi also has the property to easily blend with other fibers because of which varieties of blended fabrics are created with unique properties.
- Khadi allow skin to breathe and doesn't trap the heat.
- Khadi doesn't create any Static charge that's why it doesn't cling to skin
- There is no environmental harm can be created during the manufacturing of this fabric that's why it is an eco-friendly and sustainable fabric.

### Disadvantages of khadi fabric

- Khadi is a coarser fabric
- Khadi fabric requires care.
- Fabric is need to be starched
- It is an expensive fabric
- shrinkage and colour bleeding are high

### Sample selection

Rohini sector of Delhi is selected on the basis of convenient access to the researcher. For this, 100 Women respondents were selected of age between 25-45 years from graduate and postgraduate education status.

### **Research tool**

A detailed questionnaire was prepared to know about the awareness and to gather information about female consumer liking and disliking for Khadi Brassiere on the basis of Aesthetics, Comfort, Handling, and Marketability.

### **Data collection**

Data was gathered by the researcher from the female respondents with help of self-constructed questionnaire. The objective of the research was explained to all the female respondents in order to obtain good response.

### Assessment of developed design

Khadi Brassiere were analyzed by 100 female respondents who were purposively selected from Rohini sector in Delhi. All the female respondents are well educated and have a good knowledge about different types of fabrics and their handling technique. Developed designs were presented and were asked to evaluate

each design on the basis of Aesthetics, Comfort, Handling, and Marketability. The 3-point scale was used

as a tool for visual analysis.

Rating No.	Rating
3	Good
2	Average
1	Poor

### Material specifications for khadi fabric

Fabrics used for the study are 100% cotton khadi procured from the Khadi Gram Udyog in greige state. Five fabrics with GSM 127, 118, 182, 153 and 240 gm/m2 were selected. The various specifications of fabric are given below

Sample no	EPI	PPI	GSM
	49	33	127
2	55	37	118
3	64	45	182
4	64	40	153
5	51	26	240

Pricing and costing of the developed prototype

For price determination Direct material cost (fabric, closures, thread, needle) was calculated and 10% extra cost was added into the overall costing. The 10% included profit.

**Costing of developed Khadi Lingerie** 

Design No.	Cost of raw material+ trims	Pattern making charges	Labor charges	Total	10%profit	Total cost
1	240	100	250	590	59	647
2	260	100	250	610	61	671
3	270	100	250	620	62	682
4	240	100	250	590	59	647
5	240	100	250	590	59	647

### Consumer preference for designed Khadi lingerie

Hundred female respondents were selected for visual evaluation of developed lingerie's. Developed lingerie's were presented to the respondents to analyze them visually on the basis aesthetic appeal, Comfort, Handling, marketability and acceptability.

### Acceptability of developed Khadi Lingerie (Aesthetic appeal)

Descriptive statistics					
	Ν	Minimum	Maximum	Mean	Std. Deviation
Design1	100	1	3	2.50	.718
Design 2	100	1	3	2.03	.658
Design 3	100	1	3	2.47	.674
Design 4	100	1	3	2.00	.449
Design 5	100	1	3	1.99	.482
Valid N (listwise)	100				

#### **Descriptive Statistics**

### Acceptability of developed Khadi Lingerie (Fabric comfort)

Descriptive Statistics					
	Ν	Minimum	Maximum	Mean	Std. Deviation
Sample1	100	1	3	2.57	.700
Sample2	100	1	3	2.56	.608
Sample3	100	1	3	2.55	.609
Sample4	100	1	3	1.24	.495
Sample5	100	1	2	1.13	.338
Valid N (listwise)	100				
Acceptability of developed Khadi Lingerie (Costing)					

### Acceptability of developed Khadi Lingerie (Costing)

Descriptive Statistics					
	Ν	Minimum	Maximum	Mean	Std. Deviation
Sample1	100	1	3	2.62	.693
Sample2	100	1	3	1.56	.743
Sample3	100	1	3	2.41	.780
Sample4	100	1	2	1.28	.451
Sample5	100	1	2	1.19	.394
Valid N (listwise)	100				

### Comparative analysis of acceptability Mean

	Aesthetic appeal	Fabric comfort	Costing	Average mean
Sample 1	2.50	2.57	2.62	2.56
Sample 2	2.03	2.56	1.56	2.05
Sample 3	2.47	2.55	2.41	2.38
Sample 4	2.00	1.24	1.28	1.50
Sample 5	1.99	1.13	1.19	1.43

### Marketability of developed Khadi Lingerie (Aesthetic appeal)

Descriptive Statistics					
	Ν	Minimum	Maximum	Mean	Std. Deviation
Design 1	100	1	3	2.51	.703
Design 2	100	1	3	1.68	.680
Design 3	100	1	3	1.95	.716
Design 4	100	1	3	1.30	.503
Design 5	100	1	2	1.13	.338
Valid N (listwise)	100				

### Marketability of developed Khadi Lingerie (Fabric comfort)

Descriptive Statistics						
	Ν	Minimum	Maximum	Mean	Std. Deviation	
Sample1	100	1	3	2.36	.823	
Sample2	100	1	3	2.31	.800	
Sample3	100	1	3	1.69	.761	
Sample4	100	1	3	1.44	.625	
Sample5	100	1	2	1.10	.302	
Valid N (listwise)	100					

### Acceptability of developed Khadi Lingerie (Costing)

Descriptive Statistics					
	Ν	Minimum	Maximum	Mean	Std. Deviation
Sample1	100	1	3	2.26	.895
Sample2	100	1	3	1.78	.905
Sample3	100	1	3	2.17	.911
Sample4	100	1	3	1.27	.548
Sample5	100	1	3	1.17	.473
Valid N (listwise)	100				

	Aesthetic appeal	Fabric comfort	Costing	Average mean
Sample 1	2.51	2.36	2.26	2.37
Sample 2	1.68	2.31	1.78	1.92
Sample 3	1.95	1.69	2.17	1.93
Sample 4	1.30	1.44	1.27	1.33
Sample 5	1.13	1.10	1.17	1.13

#### Comparative analysis of marketability Mean

#### **Evaluation of lingerie fit**

Fit of a garment on the body is most important properties irrespective to the design and fabric quality evaluated after the use of product by its end-user. As a garment is constructed by the use of different materials, the final fit of the garment is depending on the body silhouette, construction of pattern and fashion trends. Fit of garment on the body is generally evaluate from a functional and aesthetic point of view. From the functional point of view, fit of clothing is mostly evaluate with respect to sensory comfort and ergonomic comfort, and from the aesthetic point of view, fit of garment is evaluated according to the running fashion trends. Garment fit evaluation could be done on a live model, or parametric human body (Dummy). In general, fit of the garment majorly depends of the structure of human, Anthropometry, properties of applied material and designing of garment.

#### **Evaluation area**

For evaluation of bra 5 live models were selected to rate the bra on different criteria.

#### Question 1 Rate the bra according to fitting of cups on breast

	Poor	Average	Good
Design 1			5
Design 2		2	3
Design 3			5
Design 4	4	1	
Design 5	5		

#### Question 2 Rate the bra according to design

	Poor	Average	Good
Design 1			5
Design 2	1	4	
Design 3		1	4
Design 4	1	1	3
Design 5	4	1	

#### Question 3 Rate the bra according to Ergonomic comfort

	Poor	Average	Good
Design 1		1	4
Design 2		3	2
Design 3		2	3
Design 4	2	3	
Design 5	5		

#### Question 4 Rate the bra according to Sensory comfort

	Poor	Average	Good
Design 1		1	4
Design 2		2	3
Design 3	1	2	2
Design 4	4	1	
Design 5	5		

#### Result

Result obtained from the above analysis; it is concluded that design and fabric of lingerie is an important parameter while evaluating the appearance of lingerie. All the lingerie's are made from 100% cotton khadi fabric with difference in GSM. Design no. 1 of lingerie gain high acceptance in all four criteria's, while design no 2 and 3 gain average acceptance and design no 4 and 5 gain least acceptance by all the live models because of the appearance and texture of fabric.

#### Conclusion

On the basis of above result it is to be concluded that developed lingerie made from khadi fabric have average acceptance in between the respondents. Design no. 1 has high acceptance in terms of design as well as in fabric comfort, fit and costing, followed by design no. 3 Majority of respondents shows their less acceptance for design no. 4 & 5, the developed product is unable to fulfil the requirement as desired by female respondents in terms of Aesthetics, comfort and handling. The GSM count of fabric is high, with the increase in value of GSM, the thickness of fabric increases and air-permeability decreases. Majority of women refuse to prefer because of poor tactile texture of fabric as well as khadi fabric require lots of care, and aesthetically look of lingerie is not appealing. Khadi is not a stylized fabric so; the quality and features of this fabric do not fulfil the requirement of today's modern consumer towards their lingerie. But if it is combined with some new and innovative technologies regarding to improve the tactile texture of fabric and designing feature it can be prove as a good fabric for lingerie's.

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