

Development of innovative abstract motifs for screen printing

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Received: 21.04.2014; Revised: 16.05.2014; Accepted: 30.05.2014

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■ **ABSTRACT** : Printing through screen is very simple, it can also be carried out with the use of complicated and expensive equipments. A great variety of design can be explored with very few changes in design and placing arrangements of screens. Therefore, an endeavour has been made to evolve unique designs, by developing abstract motifs adding a smashing touch to an otherwise traditional garment, giving the wearer a youthful and jaunty look.

■ **KEY WORDS**: Screen printing, Abstract design, Apparels, Pigment dyes

■ **HOW TO CITE THIS PAPER** : Anjum, Sumayal, Singh, Archana and Tuteja, Shweta (2014). Development of innovative abstract motifs for screen printing. *Asian J. Home Sci.*, 9 (1) : 264-266.

India is endowed with a very rich heritage in designing and printing of clothes. Since ancient time people has used textiles of various types for their specific purposes. Today, textile designs are used by everyone for making beautiful garment to dress them. The attractions in clothes are created by the introduction of design and through printing. Printing, a method of ornamentation employed first by ancient Indians and Egyptians, involves execution of the scattered or all over effect, either on a white or a coloured background.

An enormous variety of design possibilities are open to the textile designers through manipulation of scale and proportion, placement of design and selection of colour. In the present era the designs of dress material are changing rapidly since everyone has desire for uniqueness. The textile experts are constantly working to satisfy this urge. The abstract designs are getting greater momentum among the coming generation due to their attractive appearance and easy printing on apparels. These designs can be easily adapted for printing through screens, which is economical and easy to develop. So, the present investigation was planned to develop abstract designs for screen printing on sarees and apparels (short kameez and top).

■ RESEARCH METHODS

Plain-woven kota sarees and fine cotton fabric

(cambric) were used for printing on sarees and apparels, respectively.

Thirty abstract designs were developed (10 for each category) considering fashion trends and literature reviewed. These designs were adjusted in different ways to finalize the arrangement of design for printing.

Developed designs were adjudged by a panel of 30 experts for various attributes like arrangement of design, suitability of design and overall appearance. The evaluation was done separately for each attribute by ranking as excellent, good, fair and poor. Marks 4,3,2 and 1 were assigned to these and total score was calculated.

Screens were prepared for the selected abstract designs. Hand screen printing was used to print the articles. The following recipe was used for printing of cotton fabric as stated by Prayag (1997).

Table A : Recipe for printing of cotton fabric (Prayag, 1997)	
50 parts	Pigment
940 parts	Binder emulsion
10 parts	Fixer
1000 parts	

After printing, the articles were given after treatment for proper fixation of pigment colours. Finally, the printed articles were judged by the same panel of 30 experts for

sharpness of outline, quality of print, colour combination and overall appearance.

RESEARCH FINDINGS AND DISCUSSION

On the basis of evaluation by textile experts, the designs were selected and the best three designs in each category were used for developing screens.

Evaluation of abstract design for sarees:

Visual evaluation was carried out through a panel of 30 experts. The attributes for evaluation were arrangement for design, suitability of design and overall appearance.

Results of visual evaluation are reported in Table 1, which revealed that the design S₉ was given the highest preference (106 marks) by the experts, followed by designs S₂, S₁₀, S₄ and S₃ securing 100, 98, 96 and 88 marks, respectively. Design S₅ has the least preference (71 marks). Designs S₉, S₂ and S₁₀ were selected for developing the screens for sarees (Plate 1).

Sr. No.	Design code no.	Marks obtained	Rank
1.	S ₁	95	V
2.	S ₂	100	II
3.	S ₃	88	VI
4.	S ₄	96	IV
5.	S ₅	71	X



S₉ (I rank)



S₁₀ (II rank)



S₂ (III rank)

Plate 1: Printed sarees

Evaluation of abstract design for short kameez:

Fig. 1 shows the result of visual evaluation of abstract designs for short kameez. The design SK₁ ranked on top and obtained highest marks (108) followed by designs SK₆ (102 marks), SK₈ (98 marks), SK₄ (96 marks) and SK₅ (95 marks), and secured II, III, IV and V rank, respectively. Design SK₇ (70 marks) secured 10th rank and the lowest mark. For printing on short kameez designs SK₁, SK₆ and SK₈ were selected (Plate 2).

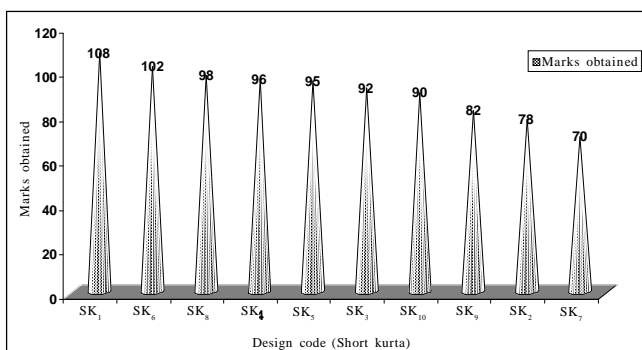


Fig. 1 : Visual evaluation of abstract design for short kameez



SK₆ (I rank)

SK₁ (II rank)

SK₈ (III rank)

Plate 2 : Printed short kameez

Evaluation of abstract design for top:

Fig. 2 shows the result of visual evaluation of abstract designs for top. The design T_3 scored highest marks (107) whereas T_6 obtained least marks (77). Design T_7 (II rank), T_1 (III rank), T_5 (IV rank) and T_4 (V rank) scored 100, 99, 98 and 93 marks, respectively as depicted graphically. Designs T_3 , T_7 and T_1 were selected for preparation of screen for top (Plate 3).

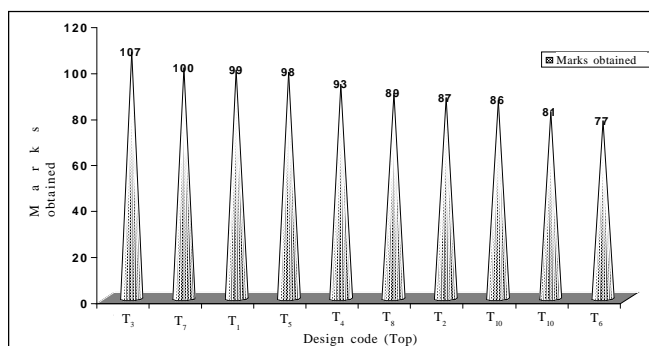


Fig. 2 : Visual evaluation of abstract design for top



Plate 3 : Printed top

Preparation of screens and printing of articles:

Screens were prepared by using selected abstract designs for sarees, short kameez and top. Then the articles were printed with the help of these screens. Later, treatment was given to printed articles for fixation of pigment colours. Finally these screen printed articles were evaluated for various attributes by textile experts.

Assessment of printed articles:

Table 2 shows the result of visual evaluation of printed articles which was carried out through a panel of 30 experts. The attributes for evaluation were sharpness of outline,

Table 2: Visual evaluation of printed articles				
Sr. No.	Printed articles	Design code no.	Marks obtained	Rank
1.	Saree	S_2	90	III
2.		S_9	108	I
3.		S_{10}	103	II
1.	Short kameez	SK_1	98	II
2.		SK_6	106	I
3.		SK_8	90	III
1.	Top	T_1	100	I
2.		T_3	96	II
9.		T_7	88	III

quality of print, colour combination and overall appearance.

Perusal of the table reveals that saree printed by using design S_9 was given the highest preference (108 marks) followed by design S_{10} (103 marks) and S_2 (90 marks).

In case of printed short kameez design SK_6 (I rank), SK_1 (II rank) and SK_8 (III rank) scored 106, 98 and 90 marks, respectively while for printed top, design T_1 , T_3 and T_7 scored 100, 96 and 88 marks with I, II and III rank, respectively.

Results also indicated that there was change in the preferences of experts before and after printing of all articles. The possible reason for such a shift in choice preference might be due to change in the get up of finished articles.

Conclusion:

Results of the study concludes that screen printed articles were highly acceptable, the creativity of the designer was appreciated. The idea of incorporation of abstract designs with the help of screen printing was considered as unique and economical. Majority of the respondents appreciated the study and stated that it has opened new avenues for the designer to explore. These designs can be easily adopted for printing through screens, which is economical, easy to develop and generate opportunities for rural women to run a cottage industry.

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