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DESIGNING HEAT TRANSFER PRINTED GARMENTS USING SELECTED CLASSICAL TRADITIONAL MOTIFS

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ABSTRACT: Heat Transfer Printing technology has been a big technological revolution. Heat Transfer Printing is a versatile and efficient method for transferring designs onto textile material. A motif plays an important role in designing. Each motif, like the fabric itself has an origin, evaluation and variety in shape and presentation. Classical Traditional Motif designs are incredibly important in many cultures around the world. Automation and mechanization have increased the product growth of heat transfer printing in textile sector. This paper has been undertaken to study by selecting Classical Traditional Motifs and imprinting the same on knitted single jersey and lycra garments. When subjected to visual evaluation and colour fastness tests, the results of the Classical Traditional Motifs were liked by almost all genders.

Key words: Heat Transfer Printing, Classical Traditional Motifs

INTRODUCTION

Textile printing is process of applying colour to fabric in definite process or designs. Khanna (2019) declares textile printing in one or more colours are applied to the material in certain parts only and in sharply defined patterns. Robert Lechene (2023) refered printing as a traditional technique for applying under pressure a certain quantity of colouring agent onto a specified surface to form a body of text or an illustration. The word 'printing' implies as a process that uses pressure and is the most versatile and important of the method used for introducing colour and design to textile fabrics express Sankar Roy Maulik (2019). The word "printing" is derived from the latin word meaning "pressing" and implies the application of "pressure". Textile printing is process of applying colour to the fabric in definite patterns or designs. It is a part of wet processing, which is carried out after pre-treatment of fabric or after dyeing. Mazharul Islam Kiron (2011) imply usually printing is performed on one side of the textile material.

Heat transfer printing is the process of transferring an image from a special transfer paper onto substrates. Heat transfer printing, also known as thermal printing or sublimation printing, is a process where designs, patterns or images are transferred from a special heat-transfer paper onto a substrate (in this case, plastic items) through the application of heat and pressure express in Jane liu (2023). The image is first printed out on a dye sublimation printer onto paper specially coated for transferring when heat is applied. Molly Frank (2011) interpret the image is then transferred to the textiles using a heat transfer press. Sarwar Muhammad (1982) explain in a very important and fairly recent innovation in textile printing has been the introduction of the heat transfer printing processes also known as the vapour phase, thermoprinting, dry heat, sublimation, sublistatic or colourstatic process. Moore (2008) represent Multicoloured designs are transferred in the vapour phase from a paper syupport to a synthetic- polymer fibre fabric under controlled conditions of temperature and pressure. Sarwar Muhammad (1982) expressed this is a process in which multicoloured designs, printed on paper with suitable dyes, are transferred in suitable fabric.

Heat transfer printing is a versatile and efficient method for transferring designs onto textile material. It offers several advantages, such as the ability to produce intricate designs, vibrant colors, and durable prints. Additionally, it is relatively easy to set up and cost-effective for small-scale production. Naim (2018) explain the Heat Transfer Printing is a popular method for transferring designs onto various substrates. It offers versatility, vibrant color reproduction, and durability. However, it may not be the most efficient option for large-scale production due to its slower speed. Nonetheless, for personalized and short-run printing needs, heat transfer printing remains a valuable and accessible solution. Two new changes in this area the shift toward rotary screen printing and improvement of heat transfer printing method.

The basic principle of transfer printing, the technological advantages and limitations, and the impact of marketing techniques in

the textile industry are reviewed vis-a-vis conventional textile printing. Fernand Schlaeppi (1977) defined variables such as properties of dyestuffs, print-paste composition, gravure technique, printing machines and transfer conditions are discussed. Transfer printing uses specialist paper printed by an inkjet printer with sublimation or other dyestuffs for later transfer to a textile substrate. Mazharul Islam Kiron (2011) formulizes in different types of transfers allow non- sublimation dyestuffs to be used as well as substrates of fiber types other than polyester, with transfer processes falling into four categories: Melt transfer, Film transfer, sublimation transfer and wet transfer. Heat transfer printing is a two-step process. First, the desired pattern is printed on paper, using inks containing sublimable disperse dyes. Second, the printed paper is placed in contact with the fabric and as heat and pressure. Gorondy (1977) in applied to the back of the paper, the dyes transfer by subliming from the paper condensing on the fiber surface, and subsequently diffusing into the interior of the fiber.

The heat transfer printing process offers an acceptable method of textiles and other susbtrates in plain colours and multi-colour designs completely divorced from aqueous treatments. Consterdine (1976) express low space requirements, unliked labour can be trained quickly to operate the transfer machines. Transfer printing allows the printing of complex designs, which may be overly expensive if printed directly onto textiles. The cost of transfer printing is low due to use of less dye and water, and less printing skill is needed. Bismark Sarkodie (2018) emphasizes that transfer printing would claim a larger market share if an equally simple process could be devised for printing cellulosic fabrics. Pigmented melt- transfer and film-release papers have long been available for printing motifs on garments.

Automation and mechanization have increased the product and growth of textile Heat Transfer Printing. The recent growth of polyurethane coated fabrics over the past years has been phenomenal, especially in consumer goods such as clothing, footwear, upholstery, handbags etc. and many millions of metres are now used annually in many parts of the world. Consterdine (1976) narrate in a great deal of effort is being put into the development of viable dry, one-stage heat transfer printing technique for cellulose fabrics by a number of trade organizations and dye manufacturers. There are many problems to be overcome if a viable process is to emerge, e.g. the process must be economically competitive with traditional methods of textile printing. It is important that the transfer to fabric is possible on existing heat transfer calenders and garment presses. The colour fastness must be equal to similar conventional textile prints. The finished fabric handle should be of an acceptable commercial standard after transfer. Heat transfer printing is highly suited to the current development of the fashion articles. Faegheh Shirazi (1976) refer in there are rapid changes in the demand for this process of printing fabrics and is expected that transfer printing will meet these successfully.

Based on the investigations made by the investigator, the topic “DESIGNING HEAT TRANSFER PRINTED GARMENTS USING SELECTED CLASSICAL TRADITIONAL MOTIFS” was selected for the study with the objectives such as to study and select Classical Traditional Motifs, to apply Classical Traditional Motifs by fusing to selected garments. and evaluate the same.

2 METHODOLOGY

The methodology for the study comprises the following steps:

2.1 SELECTION OF HEAT TRANSFER PRINTING

Heat transfer printing is an advanced and widely used technique in the textile industry for applying designs, patterns or images onto fabric. It involves the transfer of pigments or dyes from a carrier paper or film onto the fabric surface using heat and pressure (https://www.textileglossary.com). The process allows for intricate and high-quality designs to be transferred onto textile materials with precision and durability. So, the investigator selected heat transfer printing for the study.

2.2 SELECTION OF TRADITIONAL MOTIFS FOR HEAT TRANSFER PRINTING

Traditional motifs are visual elements that are used in various forms of art and design, such as textiles, architecture and ceramics. Muhammed Hajid An Nur et al. (2019) refers that motifs often have cultural and symbolic meanings that are influenced by religion, customs and natural surroundings of particular area. Traditional motifs can also be influenced by trade routes and the integration of indigenous motifs with foreign ones, resulting in stylized forms. Indian traditional textiles inherit motifs that represent Indian culture. Some of the traditional motifs include horse,parrot, fishes, rudraksha, kalasha, mango, shells, creepers, chariots and many other. Pallavi Prajapati (2021) narrate that traditional textile motifs have been inspired from flora and fauna, sculptures, paintings and architecture.

Classical Traditional motifs refer to recurring designs, pattern or symbols that have been historically used in various cultures and artistic traditions. Nizamuddin Ansari (2023) refer motifs often hold cultural or symbolic significanceand are passed down through generations, representing elements such as nature, spirituality, folklore or historical events. The Classical Traditional motifs include geometric patterns, floral designs, religious symbols, mythical creatures and depictions of everyday life. Some of classical traditional motifs include fishes, elephants, horses, tigers, parrots, peacocks, creepers, vines,tree of life, kairi (mango motif), rudraksha (beads), flowers – jasmine, lotus, kalasha (water pitcher), palanquins, chariots, etc. narrates Deepshikha and Pradeep Yammiyavar (2019). Hence, the investigator planned to selected classical traditionalmotifs for the study.

2.3 COLLECTION OF CLASSICAL TRADITIONAL MOTIFS FOR HEAT TRANSFER PRINTING

The motifs for heat transfer printing were selected from traditional paintings based on classical traditional motifs (FIG. 1). 20 motifs were randomly selected by the investigator. They are Buddha motif (Fig. T1), Village lady motif (Fig. T2), Peacock motif (Fig. T3), Lord Sivan motif (Fig. T4), Kathakali motif (Fig. T5), Fish motif (Fig. T6), Elephant motif (Fig. T7), Lord Ganesh motif (Fig. T8), Kumbam motif (Fig. T9), Butterfly motif (Fig. T10), Kerala Mural motif (Fig. T11), Parrot motif (Fig. T12), Krishna Flute motif (Fig. T13), Lord Krishna motif (Fig. T14), Lotus motif (Fig. T15), Geometric motif (Fig. T16), Madhubani motif (Fig. T17), Horse motif (Fig. T18), Warli motif (Fig. T19) and Annapakshi motif (Fig. T20) for the study.

SELECTION OF CLASSICAL TRADITION MOTIFS
FIGURE 1

2.4 SELECTION OF CLASSICAL TRADITIONAL MOTIFS FOR HEAT TRANSFER PRINTING

The collected 20 classical traditional motifs as shown in Fig. 1 (T1 - T20) were shown to 100 Chikkanna Government Arts College, Tiruppur students who were subjects to select 6 Classical Traditional Motifs. The motifs were selected based on the highest rankings for the study as shown in Table I under results and discussion. They are Buddha motif (Bm - Fig. T1), Kathakali motif (KAm - Fig. T5), Kumbam motif (Km - Fig. T9), Krishna Flute motif (KFm - Fig. T13), Geometric motif (Gm - Fig. T16) and Annapakshi motif (Am - Fig. T20) was choosen for the final heat transfer printing study.

2.5 SELECTION OF MATERIAL FOR HEAT TRANSFER PRINTING

The investigator planned to select textile materials such as knitted single jersey and lycra suitable for the study.

2.6 SELECTION OF GARMENTS

The investigator planned to select T-Shirt for Buddha motif (Bm - Fig. T1), Kathakali motif (KAm - Fig. T5), Kumbam motif (Km - Fig. T9) and Annapakshi motif (Am - Fig. T20) which is a unisex garment. Shirt was selected for Krishna Flute (KFm - Fig. T13) and Geometric (Gm - Fig. T16) motifs. So, T-shirt and Shirt was selected as garments for Heat Transfer Printing.

2.7 SELECTION OF AGE GROUP

For subjective evaluation of motif selection, garment construction and for subjective evaluation after Heat Transfer Printing, 22 years of age group was selected for evaluation of the Classical Traditional Motifs by the investigatorfor the study.

2.8 SELECTION OF CAD IN MOTIFS

The Coral Draw was selected as CAD software. The selected 6 Classical Traditional Motifs were scanned and exported to Coral Draw software to make the required changes.

2.9 PLACEMENT OF SELECTED CLASSICAL TRADITIONAL MOTIFS IN COLOUR BOARD

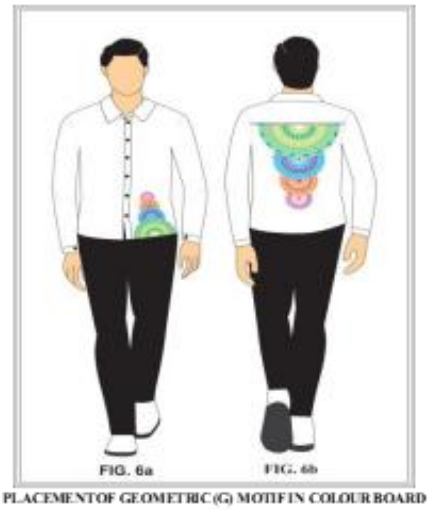
The classical traditional motifs placement was depicted in CAD diagram using Coral Draw software for the study.For each Classical Traditional Motifs, two placements were designed for the selected garments by the investigator and Flat sketch were illustrated in coral draw. The flat sketches are then rendered with colour board.They are depicted as shown in figures 2-7 respectively.

PLACEMENT OF BUDDHA (B) MOTIF IN COLOUR BOARD
FIG. 2

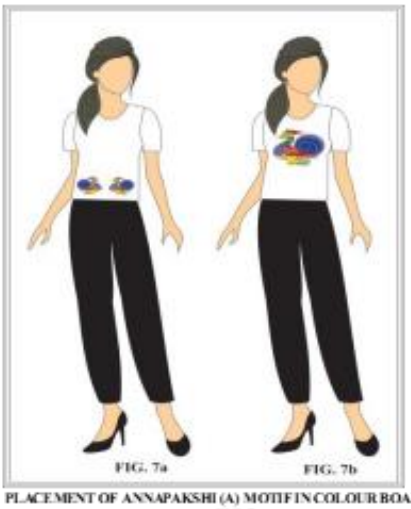
PLACEMENT OF KATHAKALI (KA) MOTIF IN COLOUR BOARD
FIG. 3

PLACEMENT OF KUMBAM (K) MOTIF IN COLOUR BOARD
FIG. 4

PLACEMENT OF KRISHNA FLUTE (KF) MOTIF IN COLOUR COARD
FIG. 5



PLACEMENT OF GEOMETRIC (G) MOTIF IN COLOUR BOARD
FIG. 6



PLACEMENT OF ANNAPAKSHI (A) MOTIF IN COLOUR BOARD
FIG. 7

PLACEMENT CLASSICAL TRADITIONAL MOTIFS IN COLOUR BOARD

FIGURES 2-7

2.10 SELECTION OF CAD PLACEMENT MOTIFS FOR FINAL STUDY

The two placements for the Classical Traditional motifs which were designed with Coral Draw CAD software in colour board was shown to 100 Chikkanna Government Arts College, Tiruppur students. The results and discussion Table II illustrating the highest ranking for placement was selected for Classical Tranditional Motifs from colour board for the final study. They are shown in Figures 2b,3a,4a,5a,6b and 7b respectively.

2.11 PROCEDURE FOR ACTUAL HEAT TRANSFER PRINTING

2.11.1 PREPARATION OF CLASSICAL TRADITIONAL MOTIF STICKERS FOR HEAT TRANSFER PRINTING

The selected classical traditional motifs for Buddha (Bm - T1), Kathakali (KAm - T5), Kumbam (Km - T9), Krishna Flute(KFm - T13), Geometric (Gm - T16) and Annapakshi (Am - T20) stickers were prepared as according to the selected colour board placements.

The stepwise sticker procedure for the preparation of Classical Traditional Motif process in as follows:

Step 1:- Classical Traditional Motifs are redrawn in the Coral Draw software

Step 2:- Editing of the Classical Traditional Motifs is carried in CAD software. After editing the motifs, they areimported to Photoshop Graphic design software in Pdf format.

Step 3:- They motifs are then exported through Photoshop software to the printer machine for printing sticker.

Step 4:- The motifs are now printed onto the heat transfer paper using printer and heat transfer ink.

Step 5:- Leaving a small border of outline marked in heat transfer paper around the motifs.

Step 6:- Cut the Motifs using scissors or cutting plotter and carefully trim around the edges

Step 7:- The Classical Traditional Motifs Sticker prepared for Heat Transfer Printing is shown in Plate 1 respectively.

Step 8:- Classical Traditional Motif Stickers for Heat Transfer Printing are now ready for actual printing.

BUDDHA MOTIF STICKER (Bm0 | KATHAKALI MOTIF STICKER (KAm) | KUMBAM MOTIF STICKER (Km) | KRISHNA FLUTE MOTIF STICKER (KFm) | GEOMETRIC MOTIF STICKER (Gm) | ANNAPAKSHI MOTIF STICKER (Am)

CLASSICAL TRADITIONAL MOTIF STICKERS
PLATE 1

2.11.2 CONSTRUCTION OF THE GARMENTS

The garment selected for the study is T-Shirt and Shirt for 22 years college students. So, 3 T-shirt's for girls and1 T-Shirt, 2 Shirt's for boys were constructed for Heat Transfer Printing using Classical Traditional Motifs.

2.11.3 ACTUAL HEAT TRANSFER PRINTING OF THE SELECTED MOTIFS IN GARMENTS

The chosen Buddha (Bm), Kathakali (KAm), Kumbam (Km), Krishna Flute (KFm), Geometric (Gm) and Annapakshi (Am) was printed using (Plate 1) stickers on the respective garments using Heat Transfer Printing.

2.11.3.1 STEPS INVOLVED IN FUSING CLASSICAL TRADITIONAL MOTIF STICKERS TO GARMENTS USING HEAT TRANSFER PRINTING

The selected motifs which were transferred into stickers (Plate 1) for the chosen placements are now kept readyfor Heat Transfer Printing into selected garments. The stepwise process is as follows:-

Step 1:- Iron the garments in order to prepare it without wrinkles for Heat Transfer Printing

Step 2:- The selected Classical Traditional motif stickers is kept ready for heat Transfer Printing

Step 3:- Place the garment onto the heat press machine lower platen

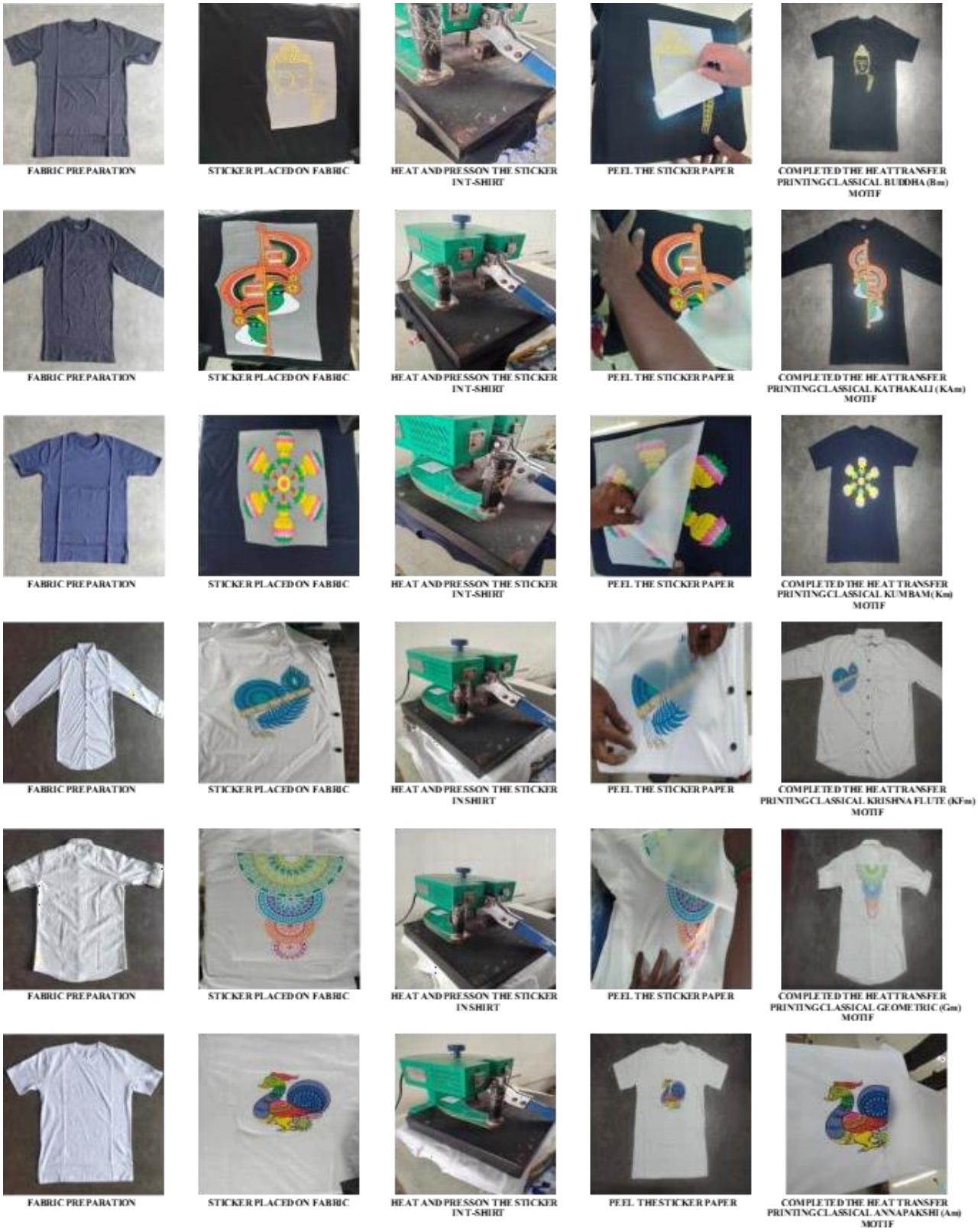
Step 4:- Place the printed transfer paper onto the garment, ensuring the motif is properly aligned and centered accordingto the desired placement on the garment.

Step 5:- Close the upper platen on the garment with transfer print paper in position

Step 6:- Then heat and pressure is applied to the sticker and garment at 220°C for 30 seconds

Step 7:- After the desired time, the garment is allowed to cool for a few seconds and carefully peel off the transfer paperfrom the garment to reveal the transferred motif.

The investigator followed the above mentioned process stepwise (Plate 2) for the selected Classical Traditional Buddha (Bm), Kathakali (KAm), Kumbam (Km), Krishna Flute (KFm), Geometric (Gm) and Annapakshi (Am) Motifs.



STEPS FOLLOWED FOR FUSION OF HEAT TRANSFER PRINTING OF CLASSICAL TRADITIONAL MOTIFS
PLATE 2

2.11.4 GARMENTS COMPLETED WITH HEAT TRANSFER PRINTING USING CLASSICAL TRADITIONAL MOTIF

The investigator finally completed the process of making stickers and fusing, the same with Heat Transfer Printing using the selected Classical Traditional Buddha (Bm), Kathakali (KAm), Kumbam (Km), Krishna Flute (KFm), Geometric (Gm) and Annapakshi (Am) Motifs. This is shown from Plate 3 respectively.

T-SHIRT WITH CLASSICAL TRADITIONAL BUDDHA (Bm) MOTIF

T-SHIRT WITH CLASSICAL TRADITIONAL KATHAKALI (KAm) MOTIF

T-SHIRT WITH CLASSICAL TRADITIONAL KUMBAM (Km) MOTIF

SHIRT WITH CLASSICAL TRADITIONAL KRISHNA FLUTE (KFn) MOTIF

SHIRT WITH CLASSICAL TRADITIONAL GEOMETRIC (Gm) MOTIF

T-SHIRT WITH CLASSICAL TRADITIONAL ANNAPAKSHI (Am) MOTIF

GARMENTS IN CLASSICAL TRADITIONAL MOTIFS
PLATE 3

2.12 EVALUATION

Evaluation is an essential part of management function, information gathering and feedback through which processes can be improved, goals can be more effectively attained and by which organizations can learn and adapt in explain Steve Brown (2015). A subject evaluation is an assessment or evaluation of something that is biased, opinions and even possibly highly influenced by the persons feeling express Mark Rozen Pettinelli (2015). In other words, it is a judgement or assessment that is influenced by personal bias or interpretation. There may be influenced by their personal taste, emotional response or individual interpretation of the piece.

Evaluation for the Heat Transfer Printing for Classical Traditional Motifs were subjected to Visual evaluation and Colour fastness tests for sunlight, washing, crocking and pressing.

3 RESULTS AND DISCUSSION

The results and discussion for the study is tabulated and discussed for the following tests. Evaluation of Heat Transfer Printing for Classical Traditional Motifs was carried out by visual evaluation and colour fastness tests.

3.1 VISUAL EVALUATION FOR SELECTION OF CLASSICAL TRADITIONAL MOTIFS FOR HEAT TRANSFERPRINTING

The choosen 20 Classical Traditional Motifs were given to 100 Chikkanna Government Arts College students, Tiruppur to select 6 motifs for Heat Transfer printing. The same is recorded in Table I.

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TABLE I: VISUAL EVALUATION OF CLASSICAL TRADITIONAL MOTIF SELECTION

CLASSICAL TRADITIONAL MOTIFS	NOMENCLATURE OF MOTIFS	RESPONSE	
		(in No)	(in %)
BUDDHA MOTIF	Bm - T1	95	95%
VILLAGE LADY MOTIF	Vm - T2	35	35%
PEACOCK MOTIF	PCm - T3	50	50%
LORD SIVAN MOTIF	LSm - T4	45	45%
KATHAKALI MOTIF	KAm - T5	99	99%
FISH MOTIF	Fm - T6	40	40%
ELEPHANT MOTIF	Em - T7	45	45%
LORD GANESH MOTIF	LGm - T8	55	55%
KUMBAM MOTIF	Km - T9	90	90%
BUTTERFLY MOTIF	Bm - T10	65	65%
KERALA MURAL MOTIF	KMm - T11	40	40%
PARROT MOTIF	Pm - T12	60	60%
KRISHNA FLUTE MOTIF	KFm - T13	96	96%
LORD KRISHNA MOTIF	LKm - T14	65	65%
LOTUS MOTIF	Lm - T15	30	30%
GEOMETRIC MOTIF	Gm - T16	95	95%
MADHUBANI MOTIF	Mm - T17	55	55%
HORSE MOTIF	Hm - T18	35	35%
WARLI MOTIF	Wm - T19	50	50%
ANNAPAKSHI MOTIF	Am - T20	98	98%

From Table I, it shows that T1 Buddha (Bm) motif was preferred by 95% of respondents, T5 Kathakali (KAm) motif was preferred by 99% of respondents, T9 Kumbam (Km) motif was preferred by 90% of respondents, T13 Krishna Flute (KFm) motif was preferred by 96% of respondents, T16 Geometric (Gm) motif was preferred by 95% of respondents and T20 Annapakshi (Am) motif was preferred by 98% of respondents. These motifs which received the highest percentage from subjects were selected for Classical Traditional Motif Heat Transfer Printing study.

3.2 VISUAL EVALUATION OF PLACEMENT OF CLASSICAL TRADITIONAL MOTIFS IN FLATSKETCH AND COLOUR BOARD

A visual evaluation was carried out to know the preference of the placement of motifs in Colour board. For each T1 – Bm, T5 - KAm, T9 - Km, T13 - KFm, T16 - Gm and T20 – Am motifs, two garment placements were designed by the investigator in Colour board. The placement of the selected 6 motifs in colour board were shown to 100 Chikkanna Government Arts College students, Tiruppur, visually to select the placement in Colour board shown from figures 2 - 7. The results received is tabulated under Table II.

TABLE II: VISUAL EVALUATION OF PLACEMENT OF MOTIFS IN FLAT SKETCH AND COLOUR BOARD

SELECTED CLASSICAL TRADITIONAL MOTIFS FOR THE STUDY	NOMENCLATURE OF THE MOTIFS	SELECTED GARMENTS	PLACEMENT OF MOTIFS COLOUR BOARD				
			FIG. No.	(in No)		(in %)	
				a	b	a	b
BUDDHA MOTIF	Bm - T1	T-SHIRT	3	98	100	98	100
KATHAKALI MOTIF	KAm - T5	T-SHIRT	4	100	95	100	95
KUMBAM MOTIF	Km - T9	T-SHIRT	5	100	90	100	90
KRISHNA FLUTE MOTIF	KFm - T13	SHIRT	6	100	95	100	95
GEOMETRIC MOTIF	Gm - T16	SHIRT	7	95	100	95	100
ANNA PAKSHI MOTIF	Am - T20	T-SHIRT	8	90	100	90	100

From Table II, it shows the placement of selected 6 Classical Traditional Motifs in Flat sketch and Colour board. The visual evaluation collected by 100 Chikkanna Government Arts College, Tiruppur students, reveals 100% for Bm - 2b, KAm - 3a, Km - 4a, KFm - 5a, Gm - 6b, Am - 7b motifs in Colour board respectively. Hence, this was finally selected for preparing Heat Transfer Printing stickers and for placement of the selected Classical Traditional Motifs in garment

3.3 VISUAL EVALUATION OF HEAT TRANSFER PRINTED GARMENTS WITH CLASSICALTRADITIONAL MOTIFS

The six garments fused with Classical Traditional Motifs using Heat Transfer Printing depicted in plates 8 - 13 was shown to 100 Chikkanna Government Arts College, Tiruppur students to subjective by evaluate for Material Selection, Colours used in Heat Transfer Printing Stickers, Preference of Colours used Over Garments and Overall Appearance of the Garment. The obtained visual evaluation for the constructed garments is recorded in Table III.

TABLE III: VISUAL EVALUATION OF HEAT TRANSFER PRINTED GARMENTS USING CLASSICAL TRADITIONALMOTIFS

PLATE No.	SELECTED CLASSICAL TRADITIONAL MOTIFS	SELECTED GARMENTS	MATERIAL SELECTION				COLOURS USED IN HEAT TRANSFER PRINTING STICKERS				PREFERENCE OF COLOURS USED OVER GARMENTS				OVERALL APPEARANCE OF THE GARMENTS			
			EXCELLENT	GOOD	FAIR	POOR	EXCELLENT	GOOD	FAIR	POOR	EXCELLENT	GOOD	FAIR	POOR	EXCELLENT	GOOD	FAIR	POOR
3	BUDDHA (Bm)	T-SHIRT	100	-	-	-	100	-	-	-	100	-	-	-	100	-	-	-
	KATHAKALI (Km)	T-SHIRT	100	-	-	-	100	-	-	-	100	-	-	-	100	-	-	-
	KUMBAM (Km)	T-SHIRT	100	-	-	-	100	-	-	-	100	-	-	-	100	-	-	-
	KRISHANA FLUTE (KFm)	SHIRT	100	-	-	-	100	-	-	-	100	-	-	-	100	-	-	-
	GEOMETRIC (Gm)	SHIRT	100	-	-	-	100	-	-	-	100	-	-	-	100	-	-	-
	ANNA PAKSHI (Am)	T-SHIRT	100	-	-	-	100	-	-	-	100	-	-	-	100	-	-	-

From Plate 3 and Table III reveals that Classical Traditional Buddha (Bm), Kathakali (KAm), Kumbam (Km), Krishna Flute (KFm), Geometric (Gm) and Annapakshi (Am) motifs was rated Excellent by all the subjects for Material Selection and Colours used in Heat Transfer Printing Stickers and Perference of Colours used Over Garments using the Classical Traditional Motifs. The overall appearance of the Heat Transfer Printed Classical Traditional Motif garments was also liked and highly rated excellent by all the subjects.

3.4 ANALYSIS OF COLOUR FASTNESS TESTS

The colour fastness tests are analyzed for Heat Transfer Printed materials such as knitted single jersey and lycra for sunlight, washing, crocking and pressing.

3.4.1 ANALYSIS OF COLOUR FASTNESS TO SUNLIGHT

The results obtained for colour fastness to sunlight when analyzed for colour change to the Heat Transfer Printed knitted

single jersey and lycra material showed no colour change

3.4.2 ANALYSIS OF COLOUR FASTNESS TO WASHING

The result for colourfastness to washing shows that there is no colour change and colour staining in the heat transfer printed knitted single jersey and lycra materials.

3.4.3 ANALYSIS OF COLOUR FASTNESS TO CROCKING AND PRESSING

Crocking and pressing were carried in both dry and wet medium. The results for both dry and wet crocking and pressing for heat transfer printed knitted single jersey and lycra samples when noted for colour change and colour staining, both materials revealed no colour change and stain.

CONCLUSION

The utilization of classical traditional motifs in heat transfer printing offers a sophisticated alternative to the common trend of using funky designs. This approach not only preserves cultural heritage but also adds a timeless elegance to the printed materials. By incorporating classical motifs, designers can create products that appeal to a broader audience. This traditional approach to heat transfer printing not only offers aesthetic value but also provides a sense of cultural richness and authenticity to the designs, making them stand out in a market saturated with contemporary styles.

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